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Unrecorded Cross-Border Trade Between Tanzania and Her Neighbors

Implications for Food Security

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TechnoServe Inc.

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Foreword

This study by Chris Ackello-Ogutu and Protase Echessah examines the impact of informal cross-border trade on food security in Tanzania. By so doing, the study makes a significant contribution to earlier efforts to authenticate the quantity of goods traded informally and dispels the myth that trade among African countries is not significant.

Despite the regional agreements and market reforms which have to a large extent minimized exchange controls and commodity movement restrictions especially within the east African common market, inappropriate policies and other restraints on trade still inhibit formal trade linkages and tend to distort relative prices in the factor/product markets. This encourages all forms of unofficial cross-border trade, to the detriment of food security and faster economic growth.

As the study points out, unrecorded cross-border trade is significant and vital to the region's economic development. It also points out that when the forces of supply and demand are left to operate without interference, the greater gains accruing in terms of regional food security and efficiency in resource allocation are enormous. Thus, unofficial trade is a pointer to the comparative advantage existing in respective countries and to the vital food security role the private sector can play in moving commodities from one part of the region to another, often against serious barriers imposed by governments.

The authors' data treatment as well as their handling of underlying issues and problems constraining formal cross-border trading is thorough and exhaustive. The constraints to formal cross-border trading revealed by the study demonstrate the gravity of the bottlenecks and the urgency with which governments, at national and regional levels, must address this problem.

The achievement of food security is one of the region's key development challenges articulated by USAID and also represents a major component of various ongoing strategic initiatives. Since 1994, the USAID Africa Bureau's Office of Sustainable Development and the Regional Economic Development Services Office for Eastern and Southern Africa (REDSO/ESA) has been putting major efforts on a regional trade analytic agenda for eastern and southern Africa, of which this study is one component. By emphasizing free trade and underscoring the importance of rational trade polices and removal of all trading malpractices, this study offers a new policy option that may guide efforts of USAID and other regional institutions and initiatives in addressing the challenges of assuring national and regional food security.

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Finally, the interpretation of the data, conclusions and any error(s) and/or omissions that may be detected in this report are entirely our responsibility.

Executive Summary

INTRODUCTION AND BACKGROUND

In the mid-1980s, Tanzania's economy was characterized by stagnant and declining output, passive exchange rate management, declining exports, reduced import capacity, foreign exchange demands for government expansion, quantitative restrictions on all imports, *de facto* rationing of most traded goods and widespread domestic price controls. Consequently, there was a growing parallel market for both imports and exports. This situation forced the government to institute liberalization measures which began in 1984 and the Economic Recovery Program (ERP) adopted in 1986 and expanded by the Economic and Social Action Program (ESAP) in 1989 across a broad range of sectors and policy instruments. Despite the macroeconomic changes that have taken place, normal official trading is still constrained by institutional and administrative bottlenecks such as high trade taxes and bureaucratic import/export procedures thus encouraging informal cross-border trade (ICBT) between Tanzania and her neighbors. In addition, the process of privatization has been extremely slow and the country's trade policies have not been harmonized with those of the neighboring countries. Rent seeking practices still abound at the official border points and poor infrastructure still militates against both internal and external trade.

Because ICBT passes through undesignated routes, estimates of its economic activities are rarely included in the national accounts. This omission could easily lead to faulty policy recommendations, particularly those based on estimates of the country's gross domestic product (GDP), savings, consumption, productivity and balance of payments. As part of the effort to begin to understand and quantify the role of unofficial trade in eastern and southern Africa, TechnoServe, on behalf of USAID's Regional Economic Development Support Office in Nairobi, Kenya (REDSO/ESA) and the Africa Bureau's Productive Sector Growth and Environment Division in the Office of Sustainable Development (AFR/SD/PSGE), commissioned a survey of unofficial trade between Tanzania and the neighboring countries in August 1995. The broad objective of the study was to provide qualitative and quantitative information about ICBT and to assess its determinants and linkages to food security.

THE METHODOLOGY

Data was collected through border observation (monitoring) at a sample of sites selected on the basis of practical considerations such as volume of trade, security, communication, transport links, availability of supporting institutions and personnel. The sites selected for intensive monitoring catered for both inland and lake (Tanganyika, Nyasa and Victoria) routes. At these sites, border monitoring was conducted by applying a census approach in order to cover all the major agricultural and industrial commodities during two weeks randomly selected from each month over a period of twelve months. Estimated average monthly trade volumes derived from the observed figures were used to compute the annual volume and value of the unrecorded trade flows.

In addition to information derived from the border observation technique, one baseline survey was conducted mid-way through the monitoring period to provide information on trader characteristics, commodity prices, costs, exchange rates, sources of information, market functions, and origin/destination of goods. Descriptive statistics were used to evaluate the significance and implications of trade policies and other constraints faced by informal cross-border traders.

TRADING PRACTICES

The results show that informal cross-border trading along the Tanzania borders was dominated by male adults most of whom resided in the border towns. Informal trading was not only confined to the traditional exchange of goods and services between communities sharing a common border but also involved commodities intended for re-export and re-sale in distant urban and rural areas. Traders dealt in small quantities of a variety of commodities as a risk management strategy against detection and confiscation by customs authorities. There were hardly any specialization and exploitation of economies of scale.

Since the availability of physical resources is a function of credit availability, it is likely that inadequate access to formal credit facilities minimized traders' ability to own physical resources such as trucks and storage facilities. Traders therefore relied on hired transport and rented storage facilities.

Transactions were carried out on a cash basis with barter trade being used only occasionally. Traders met their foreign exchange requirements mainly from parallel markets. Money changing activities were not repressed at the borders and one observed open trade in local currencies. It was also established that convertible currencies played an insignificant role in cross-border trade transactions. High tariffs and non-tariff barriers, such as long and cumbersome documentation procedures and harassment of the traders by the agents of economic police, were some of the factors constraining cross-border trade. Other constraints were unstable agricultural commodity prices, high transportation costs and lack of working capital.

VOLUME AND DIRECTION OF INFORMAL TRADE: IMPLICATIONS FOR FOOD SECURITY

Informal cross-border trade activities between Tanzania and the neighboring countries were found to be significant and involved exchange of large volumes of commodities. Four categories of unrecorded goods were identified: agricultural food commodities–mainly maize, rice, beans, sugar, wheat flour and root crops; industrial manufactures–toiletries, beer and spirits, cooking fats/oils, soft drinks, textiles (both new and used), construction materials, salt, electronics, petroleum products and car and bicycle parts; forest resources–charcoal and timber; and water resources which included all kinds of fish species and prawns. Tanzania's exports comprised mainly agricultural food commodities, fish, timber and charcoal. However, the country's imports derived from value added services from the neighbors' industrial sector, or re-exports from a third country.

Most of the traded commodities were both imported and exported. This could be due to the efficiency of the market which is responsive to the prevailing conditions of supply and demand. Tanzania is a vast country with areas of high agricultural potential far removed from the country's main consumption centers. The long distances involved between the main agricultural producing zones and the internal markets, coupled with poor infrastructure and high transportation costs make foreign markets attractive for both producers and consumers. Such distances render the notion of food self-sufficiency and restricted cross-border trade unworkable. A summary of the estimates of informal trade with the country's neighbors is presented below.

Kenya

The direction and composition of trade between Kenya and Tanzania conform to the common belief that Kenya has a comparative advantage in industrial manufacturing, but its perennial food shortages make it a net importer of agricultural food commodities from her neighbors including Tanzania. The total trade in agricultural food commodities between the

two countries was estimated at US $6.3 million, with a larger proportion (US $4.3 million) composed of exports. Of the total trade in industrial manufactures estimated at US $12.5 million, imports comprised US $9.6 million. The overall trade between Tanzania and Kenya thus amounted to US $18.8 million, with a trade balance in favor of Kenya by US $4.4 million.

Uganda

Coffee had the highest value among informally exported agricultural exports to Uganda with a value of US $1.1 million, representing 48 percent of agricultural exports to Uganda. Other important agricultural exports observed included rice, sugar, maize, maize flour and bananas. Agricultural food commodity trade with Uganda was minimal.

Among the leading industrial manufactured exports to Uganda during 1995/1996 were petroleum products which were estimated at US $0.4 million. It is worth noting that all major exports except beer, spirits, soft drinks, charcoal and timber were re-exports. Although the two countries traded in both new and used textiles, Uganda was the net exporter. Uganda was also a net exporter of a number of other minor goods such as toiletries, sweets, biscuits and salt. The overall trade between Tanzania and Uganda was estimated at US $4.5 million, with a trade balance favoring Tanzania by US $1.5 million.

Malawi

The major agricultural exports to Malawi were beans and root crops estimated at 327 metric tons (US $117,000) and 342 metric tons (US $51,000), respectively. The main agricultural import from Malawi was 5,043 metric tons of sugar valued at US $3 million. The overall trade in agricultural commodities amounted to US $3.8 million, with imports comprising US $3.5 million.

Trade in industrial products between the two countries was valued at US $1.9 million, with exports estimated at US $1.1 million. Aggregate trade between the two countries was worth US $5.7 million, with the trade balance against Tanzania by US $2.9 million.

Zambia

Substantial amounts of agricultural food commodities estimated at US $3.3 million were exported to Zambia from Tanzania. The goods comprised maize, beans, rice, root crops and wheat flour. Zambia's main agricultural export to Tanzania was sugar estimated at 7,000 metric tons (US $5.5 million) Sugar constituted 98 percent of the total US $5.7 million of agricultural commodity imports from Zambia. There were, however, unsubstantiated reports that the sugar imported from Zambia originated in Malawi.

Tanzania exported industrial goods worth US $0.4 million to Zambia while at the same time importing goods estimated at US $0.2 million. Trade in industrial manufactures with Zambia was not substantial compared with other neighboring countries. The major exports were bar soaps, toilet papers, cooking fats, soft drinks, bicycle and car parts and petroleum products; while the imports from Zambia comprised cosmetics, soap, toothpastes and new textiles. Part of the textile trade comprised re-exports from the Democratic Republic of Congo.

All in all, the total trade in both agricultural and non-agricultural commodities was estimated at US $9.7 million, with imports comprising US $5.9 million. Tanzania was thus a net importer of commodities from Zambia by US $2.1 million.

Democratic Republic of Congo (DRC)

The Democratic Republic of Congo (DRC) was found to be the largest informal trading partner of Tanzania. About US $78 million worth of agricultural commodities were exported to DRC but fish estimated at 53,000 metric tons (US $ 66 million) was the major export followed by petroleum products valued at about US $ 55 million. Part of the latter commodity may have been destined for Rwanda and Burundi whose regular supply routes were disrupted by civil strife. Tanzania also exported maize, wheat flour, rice beans and root crops to DRC.

The large volume of unofficial food exports to DRC was due to the void left by the once vibrant official trade which was the domain of the collapsed state-controlled organizations. The poor state of infrastructure in east-

ern DRC means that the region is cut off from the relatively developed western part of the country, necessitating huge food imports from its neighboring countries of Tanzania and Uganda.

The bulk (87 percent) of Tanzania's industrial imports from the Democratic Republic of Congo valued at US $76 million comprised new textiles. Other imports included cosmetics, margarine, and beer.

Mozambique

Estimates of trade with Mozambique show that food commodities moved in both directions but the trade favored Mozambique which exported goods worth US $2.2 million while its imports were estimated at about US $0.3 million. The major food imports are comprised of fish and prawns (US $0.98 million), horticultural crops–fruit and vegetable–(US $0.46 million) and food grains–maize and beans–(US $0.14 million). Tanzania's informal exports to Mozambique were limited to sugar (believed to be re-exports originating from Malawi) and a few other goods such as maize flour, rice and milk.

Trade in non-agricultural commodities between Tanzania and Mozambique was dominated by re-exports from a third country. Informal trade was, however, in favor of Tanzania, whose exports to Mozambique amounted to over US $4 million, against imports valued at about US $1 million. Informal non-agricultural exports to Mozambique constituted mainly shoes (US $1.7 million), electrical and kitchen ware (US $1.3 million), and vehicle and bicycle parts (US $0.51 million). Others included textiles, cigarettes and soft drinks. Most of these commodities originated from the Middle-East and Southeast Asia. On the other hand, the major informal non-agricultural imports from Mozambique were wood products.

INFORMAL TRADE BALANCE AND COMPARISON WITH FORMAL TRADE

The overall informal cross-border trade between Tanzania with all her neighbors for both agricultural and non-agricultural commodities amounted to US $278 million during the 1995/1996 period. Total informal agricultural exports including fish were estimated at over US $88 million, while imports were valued at about US $14 million. For industrial manufactures, including forest resources, total exports were worth over US $87 million, while imports totaled US $88 million. Therefore, the total value of informal imports during 1995/1996 was about US $102 million, while exports totaled US $176 million. Thus, the overall trade balance was in Tanzania's favor by over US $74 million. With reference to specific countries, Tanzania's informal cross-border trade balance was positive with respect to Uganda, the Democratic Republic of Congo and Mozambique, and negative with respect to Kenya, Zambia and Malawi.

According to the IMF's Direction of Trade Yearbook (1996), Tanzania's annual official trade with all countries (both exports and imports) for the year 1995 was US $2,378 million which was significantly higher than the value of unrecorded trade for the year 1995/1996, estimated at US $278 million. During the same period (1995), Tanzania's official regional trade (trade with the regional neighbors) amounted to US $204 million or about 73 percent of the estimated ICBT. Overall, Tanzania's unrecorded trade was 58 percent of the total (both official and unofficial) trade with her regional neighbors.

POLICY IMPLICATIONS AND CHALLENGES FOR INCREASED FORMAL TRADE

The study concludes that the substantial trade that occurs unofficially along Tanzania's borders has far reaching policy implications on GDP, government revenue and regional food security. The existence of unofficial trade on a significant scale implies that the

governments are not reliably informed about their trade situation, and that the revenue loss to the exchequer could be enormous.

The existence of large volumes of unrecorded trade of agricultural goods suggests that there is an important link between agriculture and regional cross-border trade. However, for this form of trade to thrive, there must be tradable surpluses. This calls for increased agricultural productivity. Agricultural productivity and development must be vigorously pursued in the region for at least four reasons: (i) to meet food needs driven primarily by population and income growth; (ii) to alleviate poverty through employment creation and income generation; (iii) to stimulate overall economic growth; and (iv) to conserve natural resources. The results of this survey should assist policy makers in Tanzania to appreciate the positive aspects of the link between agricultural productivity and trade on the one hand, and that between cross-border trade and national food security.

Informal cross-border trade stabilizes food availability by improving the supply through importation and increased production through export. It provides employment and hence income, as most of the informal traders are not gainfully employed in the formal sector where opportunities continue to dwindle. This form of trade also complements formal trade in the agricultural marketing system, and enhances efficiency in marketing by providing competition to the official trade.

Large scale unrecorded trade has important fiscal implications. For example, government budgets may be adversely affected since most developing countries derive their revenue from taxes, part of which comes from international trade. The biased national accounts which arise because of the exclusion of unrecorded trade could easily mislead planners particularly with respect to resource allocation and thrust of international relations and trade policies. One area of concern in this regard has been the governments' penchant for import/export bans and reluctance to liberalize cross-border trade especially at times of domestic shortfalls in production. Policy makers have consistently reneged on their regional commitments to trade liberalization thereby opening avenues for cross-border smuggling and rent seeking practices by public officials who control international trade activities.

Perceived loss of revenue has in the past proved to be a serious stumbling block in the implementation of policies aimed at cross-border trade liberalization. There are fears, at least in the minds of the region's political leadership, that more open borders may occasion undue loss in tax revenue. But such fears relate more to short term cash flows while mistakenly discounting the efficiency and economic benefits that open international trade offers. There are also fears that more open borders could encourage trade of contrabands and violations of phytosanitary requirements. Although these are valid concerns, it is contended that regional policy harmonization of standards and regulations for transit cargo could obviate the need for many of the current *ad hoc* and unilateral rules imposed by individual countries.

The prevalence of unrecorded trade in the region, even when most of the countries have undertaken trade reforms, points to a lack of political will and commitment to a favorable macroeconomic environment conducive to free intra-regional trade. Formal cross-border trading is still constrained by high tariffs and non-tariff barriers, such as long and cumbersome documentation procedures, instability of the foreign exchange rates, harassment of the traders by the agents of economic police, high transportation costs and lack of credit facilities. These bottlenecks have to be reduced, and, if possible, completely removed, in order for the regional markets to integrate and operate more efficiently.

Besides the above mentioned issues relating to trade liberalization and policy harmonization, there are infrastructural and marketing challenges to increasing regional trade and assuring a food secure region. Even in cases where price and other policy distortions do not exist, large proportions of non-tradable production still exists due to high transactions costs. Lowering of these costs through investment in improved transportation and storage infrastructure and marketing facilities may be as important in lowering food prices to consumers as increasing agricultural

productivity. The unrecorded trade statistics presented in this report emphasize the point that although cross-border trade is highly volatile, it nonetheless conforms to the theory of comparative advantage. But the poor state of infrastructure, particularly the poor road network in Tanzania, hampers producers' opportunities to expand and diversify their production by exploiting the neighboring countries' export markets. Although the required investments in infrastructural development are admittedly colossal, stakeholders strongly feel that policy makers in Tanzania ought to explore more vigorously, the alternative strategies that target infrastructure as a means of exploiting the existing comparative advantages, particularly in the area of food production and export. The current food self-sufficiency strategies, which are also the pillars of food security in the country's trading partners such as Kenya and Uganda, are short-sighted, and must be seriously reassessed in a regional rather than domestic context.

Finally, the results of this study have demonstrated that, given the right incentives, the private sector can play a very significant role in moving food from producers to consumers (even to drought-stricken lands and areas of civil strife), the political boundaries and bureaucratic constraints notwithstanding. The mistrust that appears to exist between policy makers (government) and the private sector practitioners, as well as the hindrances to trade that are persistently imposed by the latter, sometimes give the impression that these two parties have self-neutralizing views regarding economic development and social welfare. The view adopted here, and which we urge regional governments to consider seriously, is that the private sector should be enabled through a conducive macroeconomic environment and predictable policy regimes to play a more active role of intra-regional trading and income generation. The goals of national food security are indeed not incompatible with this notion, even when there are threats of domestic market failure arising from natural disasters such as droughts. Strong governments, as well as consistency and predictability of policy, are critical ingredients that the region's entrepreneurs need so desperately in order to function efficiently and for the food insecurity problem to be eradicated comprehensively.

Glossary of Acronyms and Abbreviations

AFR/SD/PSGE	Africa Bureau's Productive Sector Growth and Environment Division in the Office of Sustainable Development, USAID
COMESA	Common Market for Eastern and Southern Africa
DRC	Democratic Republic of Congo
GDP	Gross Domestic Product
GNP	Gross National Product
EAC	East African Community
ERP	Economic Recovery Program
ESAP	Economic and Social Action Program
IMF	International Monetary Fund
FAO	Food and Agriculture Organization
ICBT	Informal Cross-Border Trade Studies
IGADD	Inter-Governmental Authority on Drought and Development
IGAD	Inter-Governmental Authority on Development
MDB	Marketing Development Bureau
PTA	Preferential Trade Area (now COMESA)
REDSO/ESA	Regional Economic Development Support Office in Eastern and Southern Africa
SADCC	Southern Africa Development Coordination Conference (now SADC)
SADC	Southern Africa Development Community
SSA	Sub-Saharan Africa
SAPS	Structural Adjustment Programs
USAID	United States Agency for International Development

1. Introduction and Background

The 1980s have been characterized as a "lost decade" for Africa. From the early 1980s through the early 1990s, most countries in sub-Saharan Africa experienced sluggish or even negative growth rates of the agricultural sector. Whereas agricultural growth in other countries, notably in Southeast Asia, averaged more than 5 percent per annum between 1980 and 1989, growth in sub-Saharan Africa was only 1.8 percent during the same period (World Bank, 1990a). A food growth rate of approximately 1.4 percent per annum has not kept pace with a population growth rate of about 3 percent per annum thus making the region a net importer of food.

Instability in agricultural production, and hence commodity price instability, directly affects regional food security. For example, if food production decreases significantly (without imports to offset the differences) and prices increase, it affects the quantity of local food available, reduces real incomes and access to food, and increases the level of poverty and vulnerability in society. That is why food sector instability both causes and is caused by low productivity and poverty (Amha, 1997). The instability in agricultural production prompted many developing countries to attempt domestic stabilization. However, the mechanisms used in each country varied widely, viz. variable import and export tariffs, state trading organizations and other import/export control devices.

Many African countries, including Tanzania, adopted inward-looking economic policies which were characterized by the use of heavy tariff and non-tariff barriers. These barriers were intended not only as a fiscal measure for generating revenue and conserving much needed foreign exchange, but also as a deliberate policy to protect their fragile economies from external competition (Demeke and Aredo, 1997). There was a desire to build a strong industrial capacity through an import substitution strategy. The proponents of this strategy pursued policies based on infant industry arguments. Their main assumption was that the period of protection would be utilized to improve the technical efficiency and thus gradually become competitive internationally. While capitalist oriented countries (for example Kenya) relied on a mixture of tariffs and import controls to protect their industries, countries pursuing a socialist path (for example Tanzania) prohibited the importation of several categories of goods. Tanzania also stifled private initiative as attempts were made to replace markets with central plans. The resultant consequence was the much publicized economic crisis of the last decade which was compounded by mounting debts and poor export performance. Protectionism discriminated against exports which are mainly agricultural commodities in most African countries. Domestic industries suffered from capacity under-utilization due to their inability to purchase the necessary inputs. The limitations imposed by the small size of national markets also undermined the import substituting industries from realizing economies of scale. These distortions spurred the growth of parallel markets and informal cross-border trade.

During the past decade, liberalization has been the hallmark of economic policy throughout the world. In Africa, policy reforms were carried out under structural adjustment programs (SAPS), with trade liberalization, openness to foreign investment, greater reliance on market forces and reduction of the public sector in favor of the private sector being the central themes in the overall policy framework. The stabilization and adjustment measures were anchored on the devaluation of domestic currencies and the liberalization of foreign exchange markets with the objective of restoring external and domestic equilibrium and rendering the economies more efficient.

Tanzania, in particular, began economic liberalization in 1984, adopted the Economic Recovery Program (ERP) in 1986 and the Economic and Social Action Program (ESAP) in 1989. Under these programs,

the government sought to provide the necessary environment for improvement of macroeconomic management to achieve sustainable growth in per capita incomes and set the pace for poverty reduction. The overall effect of the trade liberalization measures and exchange rate adjustment was to increase economic activity. These policies dramatically increased the availability of all kinds of goods, including low-priced used clothes for low income groups, basic and luxury consumer goods, spare parts and transport equipment. Official export earnings, however, did not increase significantly, partly because of an increase in parallel market exports, which largely financed their own imports (Ndulu and Lipumba, 1989).

Along with SAPS, regional cooperation and trade has increasingly become a major strategic approach to boost economic growth and development in Africa (Opio, 1997; Demeke and Aredo, 1997). The new regional cooperation initiatives, dynamic economic growth of some regional countries and rapid globalization of trade have increased the prospects for regional trade. These new conditions demand new trade initiatives by regional countries if they are to ride the wave of growing opportunities, expand their trade of goods and services and avoid being pushed aside by rapidly changing technologies. Expanded markets allow for capacity to exploit scale gains from large investment in intermediate and capital goods industries. Regional trade can also help overcome imbalances in food supplies, thereby reducing Africa's dependence on food imports from overseas. Liberalizing regional trade of food would contribute to food security.

Tanzania's official (recorded) trade with regional countries of the COMESA/SADC sub-region is low and has been decreasing during the 1987-1991 period (Bagachwa and Naho, undated). While statistics suggest a static or declining level of official intra-COMESA/SADC trade, there are reports of increasing unofficial (unrecorded) trade in the sub-region. The magnitude of this trade is unknown. The low levels of recorded intra-regional trade can be attributed to restrictive trade policies, especially high trade taxes, foreign exchange, and import controls. These policies reduce trade incentives and encourage the growth of parallel market channels (Ng'eno, 1996).

THE PROBLEM

One of the major problems encountered when analyzing African economies is the absence of reliable, accurate and consistent official statistics (Yeats as reported in Bagachwa and Naho, undated). In Tanzania, the official statistics suffer from two major weaknesses, namely, incomplete coverage as well as inaccurate estimates of the activities covered. One of the sources of discrepancies in the official statistics is the unrecorded trade between Tanzania and her neighboring countries. In the literature, unrecorded trade is broadly defined to include all trade activities which should be included in the national income according to national income conventions but are presently not captured by official national statistics. The omission of these economic activities could easily lead to faulty policy analysis.

In Tanzania, the estimated size of the underground economy as a percentage of GNP was about 10 percent in 1978 and 31 percent in 1986 (Musonda, 1995), an indication that the size of the underground economy has been increasing. The development of informal trade was exacerbated by government interventions and restrictions which created excessive demand or supply. Tanzania, in particular, intervened to regulate the production and distribution of industrial products and trade. The intensity of the control mechanism in industry and trade evolved over time and was severe, especially in times of foreign exchange problems. The regulation mechanisms included import tariffs, quotas, foreign exchange controls, state trading monopolies, state ownership, export restrictions such as declaration of foreign currencies and export licensing, industrial licensing, price controls and confinement policy. The intervention encouraged the emergence of informal trade, first, because scarcity of goods, especially in early 1980s, created excess demand. Second, the overvaluation of the currencies generated a gap between official versus parallel market exchange rates. Third, tariffs and quotas influenced a differential in the selling price of identical tradable goods. Bans of some commodities by the Tanzanian authorities further encouraged unofficial trade. In addition,

there was widespread use of non-tariff barriers, and the private sector felt that the export and import licensing procedures were cumbersome, time-consuming and unnecessarily bureaucratic. These distortions further created incentives to beat the system.

Tanzania has also in the past concentrated its efforts in pursuing the objective of food self-sufficiency as a means of sustaining food security. But in the face of commodity price controls which were maintained as a strategy for subsidizing consumers, prices failed in their prime function of resource allocation. The consequence of this was the creation of disincentives for farmers in adopting modern farming techniques. The relative price differentials between countries and the shortage of commodities in a particular country also encouraged cross-border trade. Scarcity and shortages in some of the neighboring countries created demand and high profits. The net effect of these phenomena was to fuel trade through unofficial channels. Although regional markets appear to be highly integrated, cross-border market opportunities remain unexploited. Frequent droughts and civil strife in the region tend to exacerbate not just poverty and food insecurity but also the unfavorable macroeconomic and trade policies which often have a negative bearing on the same factors.

Due to relentless pressure from donor agencies for the implementation of Structural Adjustment Programs (SAPS), Tanzania began divesting from loss making public institutions and relaxing some of the controls on internal and cross-border trade. In addition, domestic market liberalization is being undertaken. But there are still problems with formal trade: the process of privatization has been extremely slow and obscure, trade policies have not been harmonized with those of the neighboring countries, rent seeking practices still abound at the official border points and poor infrastructure still militates against both internal and external trade. In addition to these constraints, one has to add factors such as civil strife and droughts which often lead to market failure.

Interest in ICBT has been overwhelming. However, inadequate knowledge of its magnitude not only leads to misleading figures in national accounts but also inhibits formulation of appropriate policies and strategies to exploit its potential impact particularly on regional food security.

Many questions remain unanswered about unrecorded cross-border trade. How vital is it to the economies of ESA? What are the commodities being traded and what are the quantities involved? Where does the comparative or competitive advantage lie with respect to the key commodities being traded, and what would be the net benefit to be gained from trade liberalization? As part of the effort to begin to understand and quantify the role of unofficial trade in Eastern and Southern Africa, Technoserve on behalf of USAID's Regional Economic Development Support Office in Nairobi, Kenya (REDSO/ESA) and the Africa Bureau's Productive Sector Growth and Environment Division in the Office of Sustainable Development (AFR/SD/PSGE), commissioned a survey of unofficial trade between Tanzania and the neighboring countries in August 1995.

SURVEY OBJECTIVES

The broad objective of the survey was to provide qualitative and quantitative information about informal cross-border trade and to assess its impact on national/regional food security. Questions raised above were addressed by fulfilling the following specific objectives:

- provide an overall analysis of how the informal traders overcome the major constraints facing formal traders such as mutually acceptable exchange rates, transportation, information, financing, means of balancing trade and the costs and benefits of ICBT;
- provide estimates of the magnitude of unrecorded trade highlighting the most important commodities (and categories of commodities) being traded and the trade patterns;
- give a comparative analysis of recorded and unofficial (unrecorded) trade volumes highlighting the factors determining the disparity between the two;

- provide an overall assessment of the impact of informal cross-border trade on national food security and the effects of cross-border trade liberalization; and
- recommend steps that should be taken to enhance trade between the Tanzania and her neighbors.

2. Methodology[1]

This chapter presents the methodologies used in data collection and sets out the analytical framework used in the study.

SOURCES OF DATA

For purposes of this study, informal cross-border trade is defined as unrecorded exchange of goods undertaken by various trade practitioners. It does not necessarily mean illegal trade even though aspects of smuggling cannot be ruled out entirely. Informal cross-border trade reported in this study thus comprised easily observable exchange of goods. Informal trading activities are genuinely productive and earn economic rent due to the inadequacies and inefficiencies in the system. Both formal and informal cross-border trade is concentrated in and around the established customs points of the border between Tanzania and her neighbors as well as through the lakes (Victoria, Tanganyika and Nyasa). The study dealt with both food and non-food commodities because they were sometimes exchanged for each other in the trade depending on the level of industrial development and agricultural production in respective countries. However, emphasis was on agricultural food commodities due to obvious links to food security.

A number of practitioners were involved in the informal cross-border trade. They included traders, agents, transporters/couriers, consumers and public officials. Traders consisted of registered wholesalers, retailers and informal hawkers/dealers. Agents were either registered firms or individuals acting on behalf of importers and exporters. Hawkers generally did not have permanent structures and hence operated at the open border markets and along the roads in competition with the registered retailers. Some of the hawkers were selling on behalf of the bigger shop owners and dealers. Hawkers carried the same items back and forth across the border in search of buyers thus disqualifying the goods they carried from the observational techniques to be described in the subsequent sections of this report.

Transporters/couriers was a fairly visible group at most of the borders with the traders they served invariably playing a seemingly innocuous role. Consumers freely crossed the border with what the customs officials referred to as hand/head luggage that were never recorded or taxed. Such consumers were not the same as the couriers who also operated in the same fashion but on behalf of bigger traders or transporters as described above. The small transactions consumers made amounted to fairly large unrecorded trade between Tanzania and the neighboring countries. Public officials were a crucial group in cross-border trade and generally consisted of customs officials, police officers, provincial/district administrators and cess (tax levied by local government authorities) collectors. They were an important source of secondary information as well as information relating to how trade was being conducted across the border. Furthermore, they could also operate in other non-official capacities which was of interest. Other ways of obtaining cross-border trade data was by perusing secondary sources, or primary sources through border observation as explained in the following section.

TECHNIQUES FOR QUANTIFYING CROSS-BORDER TRADE

Using Secondary Data

The use of data recorded by customs officials may, to some extent, reveal the level of unofficial trade between Tanzania and her neighbors. For a given commodity, however, the official trade figures between Tanzania and the bordering countries hardly tally. For example, Kenyan beer officially declared in Kenya as an export to Tanzania will not be recorded by Tanzania

if the merchandise is off-loaded within Kenya and smuggled across the border into Tanzania.

Even in cases where trade flows are recorded by both countries, the values may not correspond due to over-/under-invoicing or misdeclarations aimed at exploiting lower tax rates or avoiding them altogether. Further estimation problems arise when both countries do not have records of trade flows as in the case of contraband. In such circumstances, the traders would avoid declaration of these goods in either country. Similarly, trade flows in basic foodstuffs such as bananas, maize, beans, fish, fruits and vegetables, seem to go on unhindered especially when the amounts involved are small (head loads). Records hardly exist for such trade and actual border monitoring (observation) was the only option for quantification.

A Technique for Border Monitoring

A preliminary survey showed that both official and unofficial cross-border trade was concentrated in and around well established towns and customs points along the border. The unofficial routes were usually around these stations rather than in the remote and porous frontier region. Border monitoring was therefore concentrated around the established crossing points with basic infrastructure such as roads, electricity, telephone, storage, resident commercial population and some form of public security. Site selection was therefore on the basis of the volume of trade, security, communication, transport links and availability of supporting institutions and recruitable personnel. Five border zones were selected for intensive monitoring in Tanzania, namely:

i) ***Tanzania/Kenya***—Tanga (Horohoro, Deep Sea and Ngome), Holili (Makuyuni and Korongoni), Tarakea (Mbomai), Namanga and Sirari all being inland points, and Mwanza the only lake point;

ii) ***Tanzania/Malawi***—Kyela (Kasumulo—Nyasa/Msukwa, January/Timoti and Kitwika);

iii) ***Tanzania/Zambia—***Tunduma (Customs and Bendera ya Simba) and Kasesya (Customs and Safu);

iv) ***Tanzania/Democratic Republic of Congo***—Kigoma (Kibirizi and Kaseke) and Ujiji; and

v) ***Tanzania/Uganda***—Mutukula, Bukoba and Kyaka.

These monitoring sites are shown on the map. These sites were found to be the most active ones after making reconnaissance trips to the borders. Of course it could not have been possible to cover all the crossing points in a study of this nature given resource and logistical constraints.

Due to the conflicts in Rwanda and Burundi, Tanzania/Rwanda and Tanzania/Burundi borders were excluded from monitoring. Similarly, Tanzania/Mozambique border was excluded due to poor road infrastructure and availability of means of transport. This meant poor accessibility of the area and worked against a critical requirement that enumerators and their supervisors be given close supervision. The trials along Tanzania/Mozambique border also indicated low trade activity necessitating discontinuation of the exercise. Exchange of goods across the border was discouraged by insecurity in the area and fear of land mines during the protracted civil war in Mozambique. However, this border was monitored from the Mozambican side hence estimates of volume of trade are available in the informal cross-border trade country report for Mozambique and have also been reported in this study.

One other important border region that was excluded from border monitoring was Rukwa. Rukwa region borders the Democratic Republic of Congo (DRC) and Zambia and has communication links with Burundi through Lake Tanganyika. Rukwa is indeed a food surplus and an important trading region with the neighboring countries but it has accessibility problems. The region has very poor road infrastructure and the roads are usually impassable during rainy seasons. One of the major constraints to the farming community is the poor road infrastructure rendering the disposal of agricultural produce very difficult. Food grains produced in the region are informally exported to Zambia and the Democratic Republic of Congo because of high costs of road transportation to the distant inland and east coast centers experiencing food deficits.

Estimating informal trade between Tanzania and Zanzibar and Pemba had inherent accounting difficulties

and was therefore abandoned after a trial run in 1994. There was a possibility of double recording or recording of commodities already entered in the official customs records in the case of trade between Tanzania and Zanzibar. The other problem was that the goods quoted as destined for Zanzibar could be actually meant for trade with a third country (for example, the Gulf countries) thereby exaggerating informal trade between Tanzania mainland and Zanzibar. The same reasons apply in the case of Pemba.

Table 2.1 Time Chart for Monitoring Trade along Tanzania Borders

Year	Calendar Month	Monitoring Weeks of Month
1995	August (8)	8.2 and 8.4
..	September (9)	9.1 " 9.3
..	October (10)	10.2 " 10.3
..	November (11)	11.1 " 11.4
..	December (12)	12.1 " 12.3
1996	January (1)	1.2 " 1.4
..	February (2)	2.2 " 2.3
..	March (3)	3.1 " 3.4
..	April (4)	4.2 " 4.4
..	May (5)	5.1 " 5.3
..	June (6)	6.2 " 6.3
..	July (7)	7.1 " 7.4

OBSERVATION TIME FRAMEWORK

Border monitoring along the Tanzania borders lasted for a period of 12 calender months to cover the entire agricultural production cycle. The monitoring commenced in early August 1995 and ended late July 1996. The sampling procedure can be characterized as a two-stage process initially involving selection of judgmental clusters consisting of relevant trade practitioners at the specified border towns. The next stage required specification of two weeks (quarters) randomly selected from each of the twelve months with the restriction that each quarter was sampled (observed) six times thus providing adequate data to account for trade variability within a month. In the case of the Tanzania cross-border study where we commenced monitoring during the second week of August 1995, the following chart applied.

The figures in the third column of the chart indicate the weeks of the month when monitoring actually took place; for instance, 8.2 and 8.4 mean that the second and fourth quarters of August 1995 were monitored. The random selection of the quarters was meant to avoid the potential influence enumerators may have had on the trading activities and routines of those being monitored as would most likely occur if observation was concentrated at the same sites over a long stretch of time. Posting of enumerators at one point over a long period of time would also expose them unduly to life threatening encounters with smugglers who may feel that their hours of operation were being curtailed. In sum, the reasons for selecting a 14-day framework for monitoring were reduction of costs, avoidance of possibility of enumerators and their supervisors influencing traders' activities by staying too long in one area, and for purposes of randomization.

Monitoring was done using a census approach during day time (or whenever business ordinarily took place) for all the days of the week thus giving a total of 168 days (12 months x 2 weeks x 7 days). It is unlikely that substantial trade was conducted during the night because majority of the traders did not want to risk their lives and property by trading during the night. Furthermore, although the commodities could be shipped during the night, the consignments came

by the day and were thus recorded. The 12 months period was deemed long enough to capture trade seasonality within the year. The survey instruments (data monitoring sheets) were pre-coded for different types of packaging materials and their sizes. This system made it possible to have details for even very small items. Also, by employing people who are experienced as enumerators and with the supervisors at hand to assist, data recording was done with a high degree of accuracy.

Although the non-randomized nature of the sampling procedure did not allow making of inferences based on probability theory, attempts were made to cover no less than 80 percent of the unrecorded trade taking into account observation time as well as site and commodity coverage. The uncovered proportion was accounted for by trade on contrabands and goods that were not easily observable such as electronics, cigarettes, spirits, precious metals and other valuable natural resources. Similarly, any trade that took place at life-threatening hours (e.g. during the night) and places could not be covered with any degree of certainty.

The problem of missed trade is to be expected in this kind of survey (Ackello-Ogutu and Echessah, 1997), but in our case, its impact was minimized in several ways. First, most of the commodities traded were readily identified and could be recorded with precision. For example, most of the agricultural commodities, sugar manufactured in Malawi and goods manufactured by the East Africa Industries were contained in easily identified packages. Second, recruitment of the enumerators was on the basis of their thorough knowledge of the informal trade activities and practices at the site. The experience, coupled with some probing and financial inducement of the traders ensured the reliability of the records. And third, the focus of the study was on the link between informal trade and food security. The common practice was that large quantities of food commodities were being traded during day time in order to the minimize risk of theft.

The other potential problems concerned the possibility of double counting of the traded commodities by the enumerators and misdeclarations. The problem of double counting was avoided by conducting the monitoring exercise only from one side of the border: the Tanzanian side. Enumerators and their supervisors, however, crossed over to the neighboring country occasionally to compile price data, trader profiles and other relevant secondary information. Misdeclarations mainly by truck owners, could not be adequately covered because it was not practical to reasonably quantify them. Also, for safety reasons, trade taking place at night could not be adequately covered. Nevertheless, goods intended for crossing during the night were usually assembled near the crossing points during the day and transported across the border at night. Such goods were recorded by the enumerators.

The estimation of volume of trade of livestock posed a methodological problem. For example, along the Tanzania/Kenya border around Namanga, the area is inhabited by the nomadic Maasai community who move their livestock in and out of their country of origin. This phenomenon made it extremely difficult to monitor such activities. It was also difficult to differentiate genuine nomads in search of pasture from those exploiting this loophole to participate in informal trade of livestock. Minor difficulties notwithstanding, the observational technique was found to be the most cost-effective way of gathering data under border region conditions which are generally far from ideal.

DATA REQUIREMENT

In order to meet the objectives of the present study, various types of data were collected from the following primary sources:

i) Data from Weekly Observation (Monitoring): composition of the goods; quantity/volume of the goods; exchange rates; commodity prices; direction of trade; observable determinants of trade (e.g. weather and demand/supply changes); mode of transport; and packaging and popular units of measure.

ii) Baseline Data: trader characteristics; information sources; mode of communication; prices; costs; financing (sources and availability); contracts/payment methods; grading; storage; mode of transport; origin and destination of goods; and packaging materials.

The baseline information was obtained using structured questionnaires. Eighty-three traders and forty-three public officials were interviewed. The baseline survey was not intended for hawkers, couriers and consumers due to sampling and logistical reasons. It was proposed that only one baseline survey be conducted mid-way through the project on the assumption that baseline data was not likely to change significantly on a weekly basis. Their compilation only once allowed the enumerators adequate time to simply monitor (observe) movement of goods from one country to another without asking too many questions. The baseline survey also provided the opportunity for individuals, both traders and officials, to register their opinions and experiences.

DATA ANALYSIS

Analysis of data specifically highlights the following points derived from the stated objectives of the survey:

- Descriptive statistics are used to evaluate the significance and implications of trade policies and other constraints faced by informal cross-border traders. Baseline data is used to evaluate, for selected commodities, the marketing structure, functions performed and price formation.
- Quantification of trade (value terms) has been done using monthly data from cross-border trade monitoring for the stipulated period of 12 months. For a given month, denoted by *m*, the data used for derivation of monthly, and, ultimately, annual trade volumes for a given commodity can be denoted by the vector $q_m = (q_{mwd})$ where $w = 1...2$ denotes the number of monitoring weeks of month m, and $d = 1...7$ stands for days. Assuming a 30-day month, the estimate of the average monthly trade q_m in physical units is derived from the daily trade average by multiplying by 30 viz:

$$\bar{q}_m = \frac{30}{14} \sum_{w=1}^{2} \sum_{d=1}^{7} q_{wd}$$

where the symbols are as explained in the text. The estimate for the annual trade volume Q is then given as:

$$Q = \sum_{m=1}^{12} \bar{q}_m$$

Given estimates for the average price for each month p_m, the total valuation (with local currencies appropriately converted to U.S. dollars) for the annual trade is :

$$V = \sum_{m=1}^{12} \bar{q}_m \, \bar{p}_m$$

Trade balance between Tanzania and her neighbors was derived from an import-export matrix constructed using the above equation summed up for all the relevant commodities.

- We adopt FAO's definition of food security as the ability by all consumers to have both physical and economic means or access to basic food requirements at all times for healthy and productive life. Three important ingredients of food security are the availability of food through production, storage or imports; access to food by having the purchasing power to buy it from a market or the financial and other resources to grow it and stability of access which means that variability in physical and financial means of obtaining food does not expose consumers unduly to risk of starvation.

Obviously, an optimal mix of these ingredients can only be achieved through appropriate policies on domestic production, trade, distribution, prices and incomes. Whereas data and time constraints hindered

exhaustive treatment of these factors, the baseline data yielded qualified statements about the potential impact of cross-border trade on national food security and the effects of trade liberalization. In particular, analyses were undertaken to highlight the following: composition of exports and imports, food trade (staples) as proportion of total trade volume; and seasonality in local food production relative to cross-border supply availability. The results of the baseline survey are discussed in the next chapter.

3. Trader Profiles and Trading Practices

PROFILE OF INFORMAL TRADERS/ PRACTITIONERS

Table 3.1 summarizes the profiles of the informal cross-border trade practitioners (traders and public officials). Among the public officials interviewed were customs officials, immigration officers, police officers, municipal petty cess collectors and regional/district administrators.

Asked why they avoided official trade channels, traders observed that the official procedures were rigid, long and bureaucratic. In addition, most of the border

Table 3.1 Profile of Trade Practitioners

Characteristic	Percentage Involved
Gender of traders	
Male	96.4
Female	3.6
Residence of traders	
Local border town	79.5
Foreign border town	4.8
Other nearby town (over 10km away)	11.0
Other residence	4.8
Literacy of traders	97.6
Business category of traders	
Retailer	35.7
Wholesaler	28.6
Wholesaler cum Retailer	25.0
Hawker	10.7
Public officials	
Representatives from Ministries	95.0
Representatives from district councils	2.5
Representatives from local government authorities	2.5
Duties performed by public officials	
Apprehension of smugglers	30.0
Revenue collection	26.0
Issuance of licenses	18.0
Immigration assignments	7.0
Other[2]	19.0

Source: Baseline survey, 1996.

regions are remote with respect to main internal markets. For instance, a trader from a remote area of Mutukula at the Tanzania/Uganda border has to travel to Mwanza to obtain relevant export documents. The distance involved is long, the cost of travelling is high, accommodation and food expenses are also high and the means of transport is unreliable because of poor infrastructure. Obviously, these factors make the official trade channel extremely unattractive and traders therefore opt for informal ones.

Trade practitioners also observed a myriad of factors constraining cross-border trading and suggested remedial measures. Perceptions about ICBT were also given by these practitioners. These factors are as shown in Table 3.2. The majority (84 percent) of the public officials interviewed were of the opinion that ICBT was increasing relative to the 1980s.

PREVAILING PRICES OF THE COMMODITIES TRADED

Numerous commodities were exchanged informally between Tanzania and her neighbors. These commodities have already been discussed and can generally be

Table 3.2 Constraints to Trade, Remedial Measures and Perceptions about ICBT

	Percentage of respondents
Constraints	
High tariffs	39
Non-tariff barriers	11
Instability of exchange rates	11
Harassment by agents[1] of economic police	7
Remedial measures	
Better access to credit facilities	33
Removal of road blocks	17
Improved access to foreign exchange	12
Reduction of tariffs	9
Improved road infrastructure	8
Provision of storage facilities at borders	7
Educate the public on the need for paying taxes	3
Other[2]	8
Perceptions about ICBT	
ICBT is increasing	84
Contributes to low rate of revenue collection	43
Retards economic development	23
Stabilizing effect on food security	21
Contributes to corruption at the borders	19
Provides employment opportunities	3
Negates collection of trade statistics	3
Destabilizes food security of exporting country	3
Distorts agricultural commodity prices	2
Source of sub-standard goods	2

Source: Baseline Survey, 1996.

categorized as agricultural, industrial, forestry and water resources. Tanzania informally exported mainly agricultural food commodities, fish, and forest resources (charcoal and timber) and in turn imported mainly industrial goods. The trade volume estimates of some of these commodities are given and discussed later in this report.

Table 3.3 shows the average commodity prices during the baseline survey for major commodities exchanged between Tanzania and her neighbors as revealed by informal traders. These averages were derived from the prevailing cross-border prices at all the survey sites. Buying price refers to cross-border import price, while the selling price refers to cross-border export price. Commodity mean prices that prevailed during the 12 months of data monitoring for specific border sites are given in the appendix. No profitability analysis was done as this was not the objective of the present study and therefore no relevant data for such analysis was generated.

Table 3.3 Prevailing Overall Average Price per Unit of Measure at the Borders

Commodity (Import) Price (Tshs)	Average Buying (Export) Price (Tshs)	Average Selling
Maize (kg)	78	92
Beans (kg)	170	251
Fish (kg)	675	909
Cooking fat (kg)	791	927
Milk(l)	210	269
Salt (kg)	100	164
Beer (kg)	600	1,100
Toilet paper (bale)	4,300	5,200
Sodas (l)	470	680
Wheat flour (kg)	323	371
Sugar (kg)	326	393
Rice (kg)	219	336
Onions (kg)	139	159
Finger millet (kg)	92	106
Groundnuts (kg)	180	200
Seed chemical (kg)	4,000	5,000
Animal feed (kg)	450	575
Cement (bag)	---	3,800
Knitting thread (bale)	2,200	2,500
Salt (kg)	100	164
Potatoes (kg)	29	46
Pigeon peas (kg)	150	200
Petroleum (l)	259	327
Soap (bar)	515	606
Shoe soles (pair)	2,833	3,000
Cooking pots (1 unit)	900	1,300

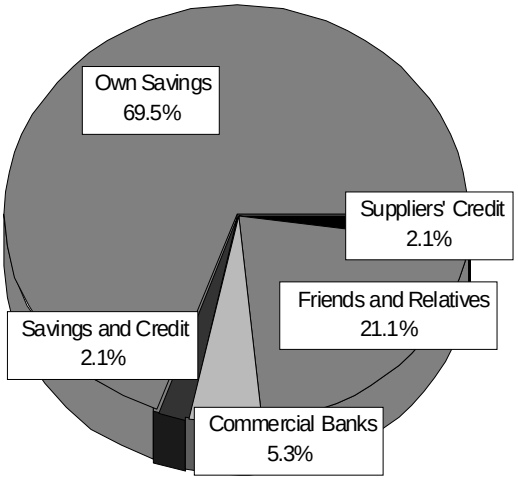
Source: Baseline Survey, 1996.

DESCRIPTION OF THE MARKETING FUNCTIONS

Trade Financing

Credit was not easily available to the small trader. This study shows that only 5 percent of the traders interviewed received their initial investment capital from commercial banks. The majority (70 percent) of the traders funded their operations from their own equity, particularly since the extent of these operations was constrained by stockholding limits. About 21 percent obtained credit from relatives and friends (informal sources). Figure 3.1 shows different sources of investment capital.

Fig. 3.1 Sources of Investment Capital



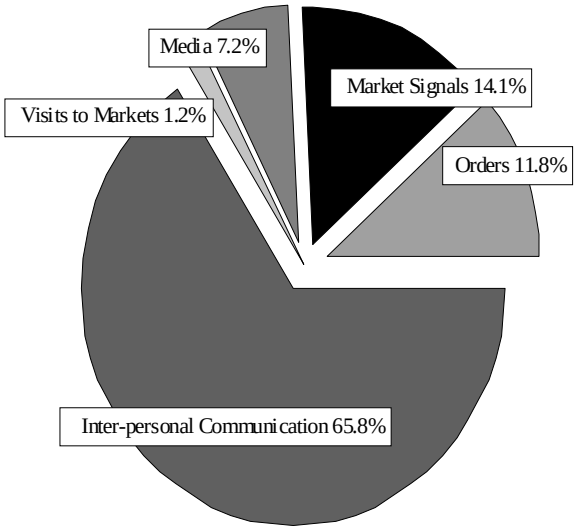
Lack of access to formal credit facilities by traders may explain why most of the informal traders' scale of operation was typically small. The traders also had little specialization in their functions. One of the reasons why most of the informal traders were not securing formal credit from the banks could be that they lacked collateral acceptable to the banks. They may also have either lacked the ability to negotiate for such loans or the cost of securing the facility was prohibitive. This area needs further research and analysis to get to the root cause of the problem. Lack of credit could therefore be a major impediment to the development of a marketing system in the present day of economic liberalization. The immediate need of most traders was to increase their working capital so that they could increase their stock. It is only when stocks are large enough that traders may consider long-term credit for the acquisition of assets such as storage facilities and trucks.

If formal credit was available, temporal (seasonal) arbitrage would seem attractive and the benefit to the consumer, in the form of stable prices, would be considerable. It is, however, unlikely that many small traders will engage in seasonal stockholding even if credit was available, as they can increase their profits very easily by increasing turnover. But larger traders and possibly *madalali* (agent middlemen) might be attracted to this type of business.

Market Information

Traders and farmers need market information to facilitate their market planning and implementation. They need information on prices, quality linked with grading and selling units. As prices fluctuate and vary greatly from one region to another, from country to country, and from season to season, it is imperative that traders and farmers are able to decide where and when to buy and sell their commodities. Such decisions are facilitated by information flows.

Fig. 3.2 Market Information Sources

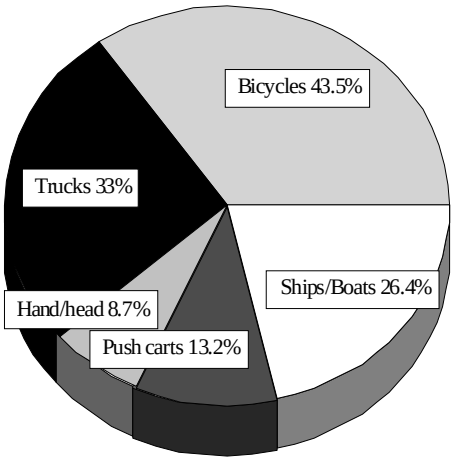


The major sources of market information were through personal contacts (66 percent), market signals - prevailing supply and demand conditions (14 percent), orders from buyers (12 percent), both electronic and print media (7 percent) and visits to markets (1 percent). Information sources are depicted in Figure 3.2.

Transportataion

Transportation, together with storage and processing, constitutes the physical function in the marketing process. The availability of physical resources is a function of credit availability. We have observed that credit

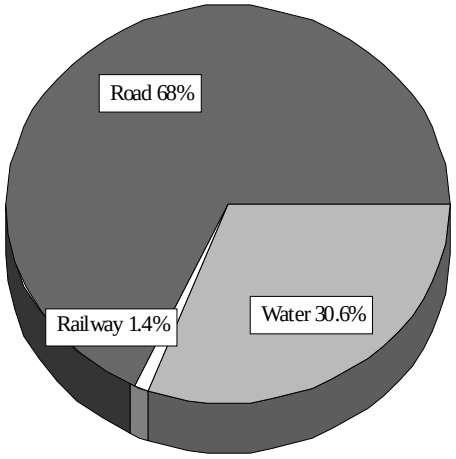
Fig. 3.3 Means of Transportation



was not easily available. Consistent with the fact very few traders owned trucks and relied almost entirely on public or private transport. The common practice is for commodities to be packed and transported on the roof rack of a coach, or for traders to hitch a lift with trucks and oil tankers. Occasionally, traders would organize themselves, rent a truck and share the costs.

Once the commodities are at the border town, arrangements are then made to smuggle them across during the day or at night. Some traders hire porters to smuggle the goods through the numerous footpaths along the borders as was evident at Namanga, Tunduma and Sirari, or the goods are loaded on ships and boats as was witnessed at Kigoma, Mwanza and Kasumulo. The most common means of ferrying goods across the border was by bicycles, trucks, ships/boats

Fig. 3.4 Ways of Transportation



and push carts as shown in Figure 3.3, while the predominant way was by road (Figure 3.4).

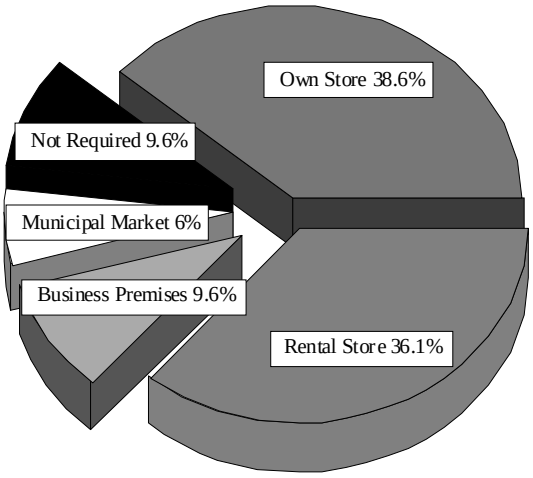
Transport and transportation networks are a problem and a major concern to the traders. They experience extreme difficulties in reaching both the supply and demand centers, more so for agricultural produce. The distances involved are long, infrastructural linkages are poor and the means of transport unreliable. In some districts, relatively high transport costs are incurred for collecting grain and these costs are passed to the farmer, resulting in lower producer prices in more isolated areas. Market integration is thus hampered by the poor transport system.

Storage

Small traders sometimes use their homes temporarily to store their merchandise. Due to the nature of the informal trade itself, long-term storage is rarely undertaken by small traders. The storage that takes place is mainly at sites close to informal trade routes from where small quantities are smuggled out. Figure 3.5 shows that 39 percent of informal traders owned storage facilities or used their homes to store the goods, 36 percent had rented them, 10 percent stored their

commodities on the business premises that were rented and only 6 percent used municipal markets.

Fig. 3.5 Storage Facilities Used



Storage function ameliorates inter-seasonal price fluctuations. The resultant desirable consequences are: farmers receive relatively higher prices in the immediate post-harvest period, food prices are stabilized, the level of post-harvest losses are decreased and trade between regions and between countries is encouraged.

Exchange Functions

The traders in the border regions used different methods to transport their merchandise across the border in order to avoid the long official procedures. The mode of payment differed from one country to another. Generally, the commodities were exchanged on cash, credit or on barter terms. Most (88 percent) of the transactions were done on a cash basis with a stronger currency between the two trading partners being the preferred medium, 6 percent on a credit basis and 6 percent used a combination of both cash and credit arrangements. Only a negligible 2 percent used a barter form of exchange. Informal money changing was a thriving activity in all the border regions and was the major source of foreign exchange for most of the traders.

Over 72 percent of the traders interviewed obtained their foreign exchange requirements from parallel foreign exchange markets, with the remainder using formal sources. The business of money changers across borders was not repressed and one could observe open trade in local currencies. It was also observed that international convertible currencies play an insignificant role at cross-border posts.

Payment was normally made in the local currency of Zambia and Malawi. In both countries, the traders received their money in Zambian or Malawian Kwacha and either exchanged the Kwacha for Tanzania Shillings at the parallel market rates or purchased industrial goods to take back with them. During the time of the survey, the Zambian Kwacha had been greatly devalued and was extremely unstable and the exchange rate was approximately one Tsh for three Zambian Kwacha, while ten Malawi Kwacha exchanged for TSH 350. Generally, the stronger of the two currencies at the border was the one most preferred for transactions. For example, Tanzania currency was the preferred currency at the border with Zambia, while Malawi Kwacha was preferred to the Tanzania Shilling along the Malawi/Tanzania border.

In the Democratic Republic of Congo, the traders were being paid either in gold or occasionally in U.S. dollars. The local currency was unacceptable because of its extreme instability. Part of the earnings could be used to buy Democratic Republic of Congo's *vitenge*. The remainder of the U.S. dollars was usually exchanged in the black market.

Trade was conducted similarly in Tanzania's border regions with Kenya and Uganda. Like in other border regions, porters were hired to carry small quantities by head, push carts or bicycles across the border. Border crossing could occur during the day or at night depending on the prevailing security situation. Monetary transactions were prevalent and both Kenyan and Tanzanian currencies were accepted on either side of the border. Barter exchange was occasionally being used in which Tanzania's agricultural commodities were exchanged for Kenya's industrial goods. Foreign exchange parallel markets were vibrant, especially at Namanga border post.

COSTS OF INFORMAL CROSS-BORDER TRADE

Explicit costs of informal trading noted during the baseline survey were rental, storage, transportation and labor. A detailed comparative analysis of the costs for the different marketing channels could not be undertaken in this study, and here we only provide a broad impression of the expenses incurred by informal traders during the survey (Table 3.4).

Over 70 percent of the traders interviewed spent below US $150 annually on storage facilities confirming how insignificant this cost is for traders. Transportation, on the other hand, constituted a major expense with 70 percent of the traders spending over US $150 annually, and about 53 percent claiming that they spent over US $250 every year. Labor payments are generally a minor expense since the majority of traders use their own or family labor with minimal outside hiring. Rental expenses consist mainly of payments made for renting business premises and sometimes accommodation for those originating from nearby or foreign border towns.

Table 3.4 Percentage of Traders by Average Annual Transactions Costs

Expense (US $)	Average Annual Cost	Percentage
Transportation	Below 50	15.7
	50 - 100	7.1
	101 - 150	7.1
	151 - 200	7.1
	201 - 250	10.0
	Over 250	52.9
Storage	Below 50	47.2
	50 - 100	11.1
	101 - 150	13.9
	151 - 200	5.6
	201 - 250	8.3
	Over 250	13.9
Labor	Below 50	13.0
	50 - 100	37.0
	101 - 150	16.7
	151 - 200	9.3
	201 - 250	7.4
	Over 250	16.7
Rental	Below 50	10.0
	50 - 100	12.5
	101 - 150	15.0
	151 - 200	22.5
	201 - 250	17.5
	Over 250	22.5

Source: Baseline Survey, 1996.

The present study was not designed to evaluate the profitability of the informal trade, consequently there are no revenue statistics given in this report. However, it was evident that practitioners stayed in this form of business because they were making profits. The potential contribution of ICBT to employment and income, especially to the border communities, was therefore quite clear.

4. Summary of Tanzania's Trade with Neighbors

EXPORTS AND IMPORTS OF AGRICULTURAL PRODUCTS AND FISH

Tanzania was a net exporter of most staple food commodities in the region including fish, but was a net importer of sugar, groundnuts, millet, seed, prawns, sorghum, milk and bread (Table 4.1). Figures A.1 and A.2 in Appendix A graphically show the quantity and value of agricultural commodity imports and exports including fish, respectively.

Table 4.2 summarizes Tanzania's informal food trade with specific neighboring countries. The table shows that Tanzania's total informal food exports were worth US $88.4 million, while informal food imports were valued at US $13.5 million.

Table 4.1 Tanzania's Volume of ICBT in Foodstuffs with Neighbors, 1995/1996

	Exports		Imports	
Commodity	**Quantity (mt)**	**Value (US$ thousands)**	**Quantity (mt)**	**Value (US$ thousands)**
Maize	18,686	3,090	284	88
Beans	7,978	4,033	9	93
Prawns		18		622
Fish	54,607	67,303	73	552
W/flour	5,001	3,302	1,212	643
Bread	---	---	105	96
Root crops*	5,407	1,533	88	25
Sugar	2,431	1,887	13,257	9,477
Rice	9,895	4,771	344	198
Vegetables		27		353
Bananas	295	78	14	3
Fruit**	374	19		110
Maize meal	187	45	25	8
G/nuts	80	36	264	53
Millet	32	3	396	105
Sorghum	---	---	63	20
Seed		2		225
Livestock		123	---	---
Milk		17		154
Coffee		1,117		42
Other***		982		646
Total	104,973	88,386	16,134	13,513

* Root crops include cassava, Irish potatoes, sweet potatoes and yams.

** Fruit includes citrus, pineapples, plums and passion fruit.

*** Other refers to tomatoes, eggs, onions, choroko, cabbage, cashew nuts, coconuts, cotton seeds, cotton seed cakes, and hides and skins.

Table 4.2 Tanzania's Informal Food Trade with the Neighbors (US$ millions)

Country	Imports	Exports
Kenya	2.0	4.3
Uganda	0.1	2.3
Zambia	5.7	3.4
Malawi	3.5	0.3
DRC*	0.0	77.8
Mozambique	2.2	0.3
Total	13.5	88.4

* The Democratic Republic of Congo

Source: Calculated from Monitoring Data, 1995/1996.

Table 4.3 Value of ICBT in Industrials between Tanzania and Neighbors, 1995/1996

Commodity	Value of Exports (US$ thousands)	Value of Imports (US$ thousands)
Cooking Fats/Oils	3,457	2,524
Margarine	22	2,745
Toiletries	729	7,905
Petroleum Products	55,715	1,766
Beer and Spirits	713	1,756
Soft Drinks	500	283
New Textiles	2,613	66,315
Old Textiles	1,740	10
Electronics	2,086	50
Const. materials	853	77
Sweets & Biscuits	166	745
Car & Bicycle Parts	2,272	674
Wood Products	115	700
Shoes	1,667	10
Salt	3,992	520
Other*	10,006	2,706
Total	87,145	88,789

* Other refers to kitchenware, old newspapers, drugs, matches, general plastics, exercise books, mats, spices, cigarettes, dry cells, paint, drums, traveling bags, gunny sacks, umbrellas, fertilizer, mattresses, herbicides, insecticides, handicrafts, motor boat engines and compressors.

Source: Monitoring Survey Data, 1995/1996.

EXPORTS AND IMPORTS OF INDUSTRIAL PRODUCTS AND FOREST RESOURCES

Tanzania was a net exporter of the following industrial manufactures: cooking fats and oils, petroleum products, soft drinks, old textiles (used clothes, popularly known as *mitumba*), electronics, construction materials (cement and iron sheets), car and bicycle parts and salt. Part of most of these commodities were re-exports originating from a third country. Table 4.3 shows the value of both exports and imports of industrial goods between Tanzania and the neighboring countries which are also graphically shown in Figure A.3 in Appendix A.

Table 4.4 summarizes Tanzania's informal trade of industrial manufactures and forest resources with specific neighboring countries. Table 4.4 shows that Tanzania's total informal exports in industrial manufactures and forest resources were worth US $87.2 million, while informal imports of the same commodities were valued at US $88 million.

AGGREGATE AND BALANCE OF TRADE BETWEEN TANZANIA AND NEIGHBORS

The overall value of all the informal (both agricultural and non-agricultural) imports for the year 1995/1996 between Tanzania and her neighbors was US $101.5 million, while the informal exports were valued at US $175.6 million. The combined informal trade between Tanzania and her neighbors was thus estimated at US $277.1 million, with the balance of trade being in favor of Tanzania by US $74.1 million. The balance of trade with the specific countries shows that informal cross-border trade favored Tanzania with respect to Uganda, the Democratic Republic of Congo and Mozambique, while the balance of trade was against Tanzania with respect to Kenya, Zambia and Malawi (Table 4.5).

Table 4.4 Tanzania's ICBT in Industrials and Forest Resources with Neighbors (US$ millions)

Country	Imports	Exports
Kenya	9.6	2.9
Uganda	1.4	0.7
Zambia	0.2	0.4
Malawi	0.8	1.1
DRC*	75.9	77.9
Mozambique	0.1	4.2
Total	88.0	87.2

* The Democratic Republic of Congo

Source: Calculated from Monitoring Data, 1995/1996.

Table 4.5 Tanzania's Aggregate and Trade Balance with Neighbors (US$ million)

Country	Imports	Exports	Total	Balance of Trade
Kenya	11.6	7.2	18.8	-4.4
Uganda	1.5	3.0	4.5	+1.5
Zambia	5.9	3.8	9.7	-2.1
Malawi	4.3	1.4	5.7	-2.9
DRC	75.9	155.7	231.6	+79.8
Mozambique	2.3	4.5	6.8	+2.2
Total	101.5	175.6	277.1	+74.1

Source: Calculated From Monitoring Data, 1995/1996.

COMPARING UNRECORDED AND OFFICIAL TRADE FIGURES

In this section, we present Tanzania's official trade statistics for the period 1989 to 1995 and compare them with the estimates of unrecorded. It is evident from Table 4.6 that Tanzania's trade has been increasing over the years. This increase can be attributed to the trade and exchange rate liberalization the country has implemented in the last few years. In particular, reforms are likely to have increased recorded trade by removing barriers to formal trade.

Table 4.6 Tanzania's Official Trade Statistics, 1989-1995 (US$ millions)

Year	Export	Import	Total
1989	257	718	975
1990	416	1,021	1,437
1991	413	1,233	1,646
1992	472	1,512	1,984
1993	494	1,421	1,915
1994	550	1,438	1,988
1995	719	1,659	2,378
Average	435.9	1,286.0	1,760.4

Source: IMF, Direction of Trade Statistics Yearbook, 1996.

A comparison between informal trade figures for the year 1995/1996 and formal trade figures for the year 1995 between Tanzania and the neighboring countries shows that informal cross-border figures represented a substantial proportion of the total (both formal and informal) trade between the partner countries. For instance, ICBT constituted over 98 percent of Tanzania's trade with the Democratic Republic of Congo, about 66 percent of the total trade with Malawi and 41 percent of the total trade with Zambia over the period under review. However, the proportion of ICBT in the total trade between Tanzania and Kenya was the smallest and accounted for only 11 percent. Overall, ICBT formed about 58 percent of the total regional trade (Table 4.7). From a global perspective, ICBT comprised 12 percent of Tanzania's official trade with the whole world.

Table 4.7 Comparison of Formal and Informal Trade Statistics (US$ millions)

Country	Formal 1995	Informal 1995/1996	Total	Infomal Trade as % of Total Trade
Kenya	161	18.8	179.8	10.5
Uganda	10	4.5	14.5	31.0
Zambia	14	9.7	23.7	40.9
Malawi	3	5.7	8.7	65.5
DRC	4	231.6	235.6	98.3
Mozambique	12	7.7	19.7	39.1
Total	204	278	482	57.7

DETERMINANTS OF INFORMAL TRADE

The factors which were found to be the major determinants of unrecorded trade are briefly discussed below.

Trade and Economic Policies

Many studies have explored the reasons why informal trade is carried out. It has been pointed out that, in general, the restrictive policies followed in many countries create incentives for informal trade. Restrictions such as import tariffs, quotas, exchange control, state trading monopolies, and export restrictions such as declaration of the foreign currencies and export licensing create incentives to beat the system.

For example, in the case of Tanzania, markets for agricultural produce and inputs were controlled by monopolistic parastatals. The control of all producer and consumer prices by the state prevented the signaling of shortages and the generation of a supply response. These signals had to be transmitted through the "parallel economy," outside the official system. The overvaluation of the exchange rate slowed agricultural exports, reduced international competitiveness, and caused severe shortages of foreign exchange.

Restrictive trade policies slapped on some commodities may also influence unofficial trade. For instance, despite export bans, Zambian traders informally shipped huge volumes of sugar to Tanzania in 1996. While in late 1995 and early 1996, despite Kenya's export ban on maize because of a projected crop failure, Kenya's maize was being sold illegally to Uganda after grain stocks of the latter had been depleted by relief agencies serving displaced populations in southern Sudan, Rwanda and Burundi (Ackello-Ogutu and Echessah, 1997). Similarly, food grains continued to flow into Kenya especially through Namanga border point despite Tanzania's export ban in 1996/1997 (*The East African*, 7-13 April 1997; 4-10 November 1996).

In the case of Zambia, the under-development of the agricultural sector can be viewed from the pre-independence era when the then policy discouraged agricultural production in favor of the production of mineral resources. Even then, the government policy of price intervention, food self-sufficiency, policy restraint on crop diversification and consumption subsidies worked against the development of the sector. The effects of these policies are presently still being felt and manifest themselves in imports of huge amounts of food grains into Zambia, as this study has revealed.

The other cause of informal trading could be the uncoordinated and partial implementation of structural adjustment programs. A case in point is the fertilizer trade between Zambia and Malawi. It is reported that the privatization of the fertilizer industry in Malawi led to the diversion of subsidized fertilizer from

Malawi to Zambia (Minde and Nakhumwa, 1997). This diversion was apparently only temporary because estimates of informal cross-border trade show that Zambia 'exported' 17,000 metric tons of fertilizer valued at US $8 million to Malawi in 1995/1996 once privatization drove up prices in the latter country. The close integration of the regional markets imply that policies on subsidies and market reforms in one country, if not harmonized with those of the neighboring countries, can lead to undesirable consequences such as higher prices to intended target groups or conversion to alternative low priority uses/users.

Climate and Cropping Patterns

Despite the similarities in the range of agricultural commodities produced by the different countries in the region, staggering cropping seasonality and differences in comparative advantage and impact of weather create vast opportunities for trade. Food crop production is typically dependent on rainfall and both producer and consumer prices vary widely between seasons and from one country to another. The rainfall and soil conditions also differ from one country to another.

It is well known that the individual main staple foods are differently prone to drought. As production patterns differ between countries and as the consumption patterns, for example of cereals, are more or less similar in the region, many a time, cross-border trade increases during drought to mitigate the effects of production shortfalls in the drought-stricken countries.

Infrastructure and Costs of Transport

The pan-territorial pricing system, of cereals in particular, and subsidized inputs promoted maize production and agricultural development in the southern highlands of Tanzania. Regions such as Rukwa and Ruvuma far away (over 1,000km) from the main internal market of Dar-es-Salaam, were therefore implicitly subsidized (transport subsidy). Hand in hand with long distances are the poor infrastructural linkages and scarcity of means of transport.

Since the liberalization process was put in place, agricultural producers in remote areas with respect to major internal consumption centers have been faced with transportation problems and the development of alternative marketing channels, particularly trade with the nearby neighboring countries (external markets), have become attractive. For example, food grains produced in Rukwa region in the south western region of Tanzania are informally exported to the neighboring countries of Zambia, the Democratic Republic of Congo and Burundi because of high costs of road transportation to the distant inland and east coast centers experiencing food deficits. The same applies in the case of trade of food commodities between Kenya and some parts of Tanzania around Arusha and Lake Victoria. Thus, the problem of distance to the internal markets for both products and inputs can enhance cross-border trade.

Similar problems are experienced by agricultural producers in the northern part of Mozambique whose poor road infrastructure linkages with relatively food deficient areas of the south of the country forces the producers to dispose of their produce in more lucrative market in Tanzania by exploiting the Indian Ocean route. From a food security point of view therefore, it is possible to have food inaccessibility (physical unavailability and/or unaffordable prices) amidst surpluses within the same country.

Production and Consumption Structure

It has been noted that despite the similarity in the range of agricultural products produced in the region, there are marked regional differences in the way climatic factors impact on agricultural production. Even relative stabilities in the production of different commodities differ from one country to another. For example, Tanzania is a relatively stable rice producer while Uganda is a relatively stable millet/sorghum producer. Individual crops are also affected differently by weather conditions, and there may be negative covariances in fluctuations of individual crops. Millet/sorghum withstand harsher conditions than maize while cassava and sweet potatoes thrive in drier areas of the region. These differences create opportunities for trade.

Different crops also rank differently in different countries as major staple crops. In east Africa for example, maize is by far the most important cereal crop. It

is the main staple food in most parts of Kenya and Tanzania. In Uganda, however, maize has not been widely adopted in the diet in most parts of the country, although it is becoming more popular among the urban population due to the high cost of *matoke* (cooking banana), the main staple.

Comparative Advantage

Comparative advantage is another factor driving cross-border trade. The determinants of comparative advantage are resource endowments, agro-climatic patterns, distance to market outlets and the condition of infrastructure. In most developing countries, social or economic profitability deviates from private profitability because of distortions in the factor and output markets, external issues and government policy interventions that tend to distort relative prices. These distortions encourage illegal trade.

But if we have to broadly categorize traded commodities into two–agricultural and manufactured–then regional trading partners can also be broadly classified as having a comparative advantage either in agricultural production or in the production of (manufactured) value added goods. The direction and composition of trade between Kenya and Tanzania conform to the common belief that Kenya has a comparative advantage in industrial manufacturing, but its perennial food shortages make it a net importer of agricultural food commodities from her neighbors including Tanzania. In the case of trade between Tanzania and Uganda, the absence of a clear distinction between the two countries' comparative advantage in agricultural production or manufacturing probably explains why Uganda was the least important trading partner with Tanzania.

Informal cross-border trade of food commodities between Malawi and Mozambique could partly be explained by the poor marketing infrastructure on the part of Mozambique especially in storage and processing. This trade is carried out because presently, Malawi has a comparative advantage in storage and processing, especially in the case of maize. One therefore finds both imports as well as exports of food grains: Malawi imported 9,706 metric tons (US $2 million worth) of grains from Mozambique in 1995/1996 and exported back 2,687 metric tons of the same commodities worth US $0.3 million (Minde and Nakhumwa, 1997).

Trading patterns between Kenya and Uganda follow a pattern similar to that between Kenya and Tanzania. Kenya has a comparative advantage in manufacturing and agro-processing while Uganda and Tanzania have a relative comparative advantage in the production of food commodities such as maize, beans and fish. Similarly, the trading pattern between Mozambique and her neighbors shows that Mozambique's exports depend on primary commodities in exchange for industrial goods from her neighbors' more advanced industrial sectors (Macamo, 1997). The same applies in the case of Malawi which has comparative advantage in value added processing relative to Tanzania and Zambia.

It is, however, necessary to make an important qualification to the foregoing discussion. There are cases where countries export goods in which they do not possess comparative advantage thus requiring a distinction between "comparative advantage in production" and "competitive advantage." South Africa for example is known to export maize to her northern SADC partners, yet recent studies show that it is countries such as Mozambique and Zambia which have comparative advantage in the production of that commodity (Andre and van Zyl, 1998). Similar studies done in east Africa by Odhiambo et al (1996) showed that although Kenya is a low cost producer of maize compared to Uganda, cross-border trade flow in maize is persistently in the direction of Kenya, usually targeting food deficit low lands in the western parts of Kenya. In these examples, South Africa and Uganda export maize despite their lower relative advantage in production but do possess a marketing or competitive advantage deriving from the economics of storage, transport and availability of a captive market.

5. Informal Trade and Food Security in Tanzania

UNDERLYING CONCEPTS

In this chapter, we explore the linkages between agricultural production, trade and food security. Central to the discussion are the consequences for production, consumption and trade as well as implications for price and income variability and the overall economic performance. But first, we look at food security concepts followed by the discussion of determinants of trade. We then deal with trade in specific commodities and the implications of this trade to food security.

In broad terms, food security is defined as "the access by all people at all times to adequate food for a healthy and productive life and where such access is stable over the years." The definition embraces three major elements: first, the availability of food which is a function of production, stockholding and trade (imports); second, access to food by having the purchasing power to buy it from a market or the financial and other resources to grow it; and third, stability of access, which means that variability in physical and financial means of obtaining food does not expose consumers unduly to the risk of starvation. The fourth element which can be added to the concept of food security is the physical well being of consumers and their ability to convert food nutrients to energy needed for a healthy and productive life. Household availability of food requires that food be available at local or regional markets, which is determined by market operations, infrastructure, and information flows. Access to food by households and individuals is usually conditioned by income: the poor commonly lack adequate means to secure access to food.

Thus, food insecurity does not necessarily arise from inadequate food supplies, but from a lack of access by households, individuals, communities, regions or nations to food because of low incomes. This is at the micro-level. At the macro-level, merely increasing the production or supply of food will not necessarily result in an improvement in food security unless individual consumers can be assured of access to it. Hence, macro level food security implies that the country is able to store or import enough food for its citizens and make sure that consumers can have access to it when need arises.

Food insecurity is either chronic or transitory. Chronic food insecurity involves a continuously inadequate diet caused by the persistent inability to acquire food by whatever means—producing, buying, bartering, sharing, foraging, and so on. Transitory food insecurity is a temporary decline in a household's access to enough food, arising from instability of food prices, food production, or household incomes. Policies for reducing chronic food insecurity differ from those that aim at reducing transitory food insecurity. Policy options for reducing chronic food insecurity include increasing the food supply (through production, imports or improving market integration), subsidizing consumer prices and targeting income transfers. Policy options for reducing transitory food insecurity may include stabilizing supplies and prices and assisting vulnerable groups directly. In any country, the food insecure comprises different subgroups and food security measures must be tailored to the needs and circumstances of each group.

High on the agenda of food security matters are therefore the following: food supply to meet the growing demand of a growing population, stability of food supply, low food prices to make food affordable to more people, maintenance of the future production capacity of agriculture (sustainability), protection of the environment, provision of farmers with fair income and alleviation of rural poverty, and the development of the economy at large.

The large volume of informal cross-border trade shows that regional integration is already extensively practiced through informal trade and other unofficial exchanges. The growth in informal trade across borders partly re-establishes the extensive trade of goods

and the migration of people that were a feature of economic and social life before colonization. The many benefits of greater economic integration are already visible in daily life through this informal exchange that keeps prices down by increasing competition, supplies products across borders that would otherwise be unavailable, provides opportunities for employment in neighboring countries and encourages entrepreneurial activities. Informal trade also involves profiteering made possible by official barriers and discrepancies in incentives among countries. Thus, informal trade plays an important food security role of moving food from surplus to deficit areas as well as providing an income to those involved in such activities.

ICBT contributes to food stability by improving the supply through importation and increased production through export. For consumers, ICBT offers great opportunities to access goods in small and affordable packages. It therefore provides markets for producers and avails foodstuffs to consumers thus leading to increased production through trade. However, the impact of this trade on price stability is not clear. Without trade, price variability is a function of domestic supply variability. Its amplitude is determined by elasticities of domestic supply and demand, increasing the greater the inelasticity of either or both. Policies, of course, could attempt to moderate price variability through storage, subsidies or price guarantees but fundamentally market price variability is driven by the domestic weather.

With trade, the source of domestic price variability is the world price variability. The likely effect is that the amplitude of price variation in international markets would be less than the variation in domestic markets. Consumers thus experience access to a more diverse bundle of goods, paying lower prices for importables as well as for home goods, while prices of exportables rise. Overall, the real incomes of consumers, and real cost of intermediate producers, become far less dependent on domestic supply shocks which, together with diversification in consumption, should make their incomes more stable and on the average, higher.

The implementation of structural adjustment programs in regional countries led to the retrenchment of many workers both in the public and private sectors. Our findings from the border areas indicate that most of those engaged in informal trade activities were those who had been retrenched and therefore lacked employment in the formal sector. Informal trade can therefore be said to be acting as a source of employment and income. The down side of ICBT is that it is accommodating to illegal trade and trade of sub-standard or condemned goods which could endanger consumers' health. These negative aspects notwithstanding, ICBT plays a an important role in the welfare of the producers, consumers and the regional economies at large. In the sub-section that follows, we illustrate this important role by highlighting informal trade of selected agricultural commodities.

INFORMAL TRADE OF SELECTED AGRICULTURAL COMMODITIES

Maize and Maize Flour

Informal maize trade between Tanzania and her neighbors constitutes a small proportion of Tanzania's national production and consumption requirement estimated at about 2.3 million tons (1992/1993) and 2 million tons per annum, respectively (MDB, 1993). Tanzania can therefore be looked at as being self-sufficient in maize, but sometimes localized shortages do occur even in normal production years due to distributional problems. Also, given that most of Tanzania's neighbors (for example Zambia, Kenya and Democratic Republic of Congo) are food deficient, it is likely that the attractive commodity prices in those countries spark off food commodity out-flows even if there were shortages in Tanzania. Therefore informal trade plays a major food security role of distributing food to deficient neighboring countries and earning income to the sellers.

Until liberalization measures were put in place beginning in the mid-1980s, the marketing of major food grains (maize inclusive) was dominated by monopolistic parastatals (for example, the National Milling Corporation, NMC, and the Regional Cooperative Unions). This phenomenon encouraged the production of major crops in relatively isolated areas of

the country. However, since the liberalization of markets, there has been a shift in agricultural production, the crumbling of the official marketing institutions and greater participation in maize trading by the private sector. The liberalization of grain marketing has, among other things, tended to give advantage to food producing regions that are adequately linked to major consumption centers. The food surplus regions which are isolated from the main internal market centers and the main transport routes are disadvantaged. Alternative marketing channels (cross-border trade) have become attractive, providing agricultural markets for Tanzania's producers thereby earning them income.

Through this point, 284 metric tons of maize valued at US $36,000 were imported during the period under review, as shown in Table 5.1. It is worth noting that maize flour was also traded between Tanzania and her neighbors with major trading partners being Kenya and Uganda. About 187 metric tons of maize flour valued at US $45,000 was exported to Kenya and Uganda, while 25 metric tons of the same commodity valued at US $8,000 was imported from Kenya.

Seasonality in maize trade, like in other agricultural commodities, is mainly influenced by production patterns. Traders buy the agricultural produce at harvest time around July when farmers are in dire need

Table 5.1 Quantity (mt) and Value (US$ thousands) of ICBT in Maize by Site, 1995/1996

	Export		Import	
Site	**Quanity**	**Value**	**Quanity**	**Value**
Namanga	2,577	411	--	--
Tanga	41	8	--	--
Horohoro	44	10	--	--
Tarakea	876	114	--	--
Holili	486	61	–	–
Mwanza	851	102	--	--
Sirari	1,041	139	–	–
Kyela	9	1	284	36
Tunduma	6,607	1,257	--	--
Kigoma	6,031	920	--	--
Mutukula	123	22	--	--
Total	18,686	3,046	284	36

Of the food staples[6] informally traded between Tanzania and the neighboring countries, maize was ranked highest in physical terms and was only second to beans in value terms. Over 18,000 metric tons of maize valued at US $3 million was informally exported from Tanzania to the neighboring countries. The three most important sites for maize trade were Tunduma (Zambia), Kigoma (Democratic Republic of Congo) and Namanga (Kenya). The only maize imports came from Malawi through the crossing point of Kyela.

of money and when producer prices are very low. Some larger traders were said to be involved in price speculation by buying large quantities of the produce at harvest time and gradually exporting the produce when export prices begin to go up. It can be observed from Table 5.2 that export prices (cross-border selling prices) for maize were lowest in August and highest around May, while import prices (cross-border buying) were lowest in June and highest in December. Maize import prices remained below the export prices for most of the year. Graphical representation

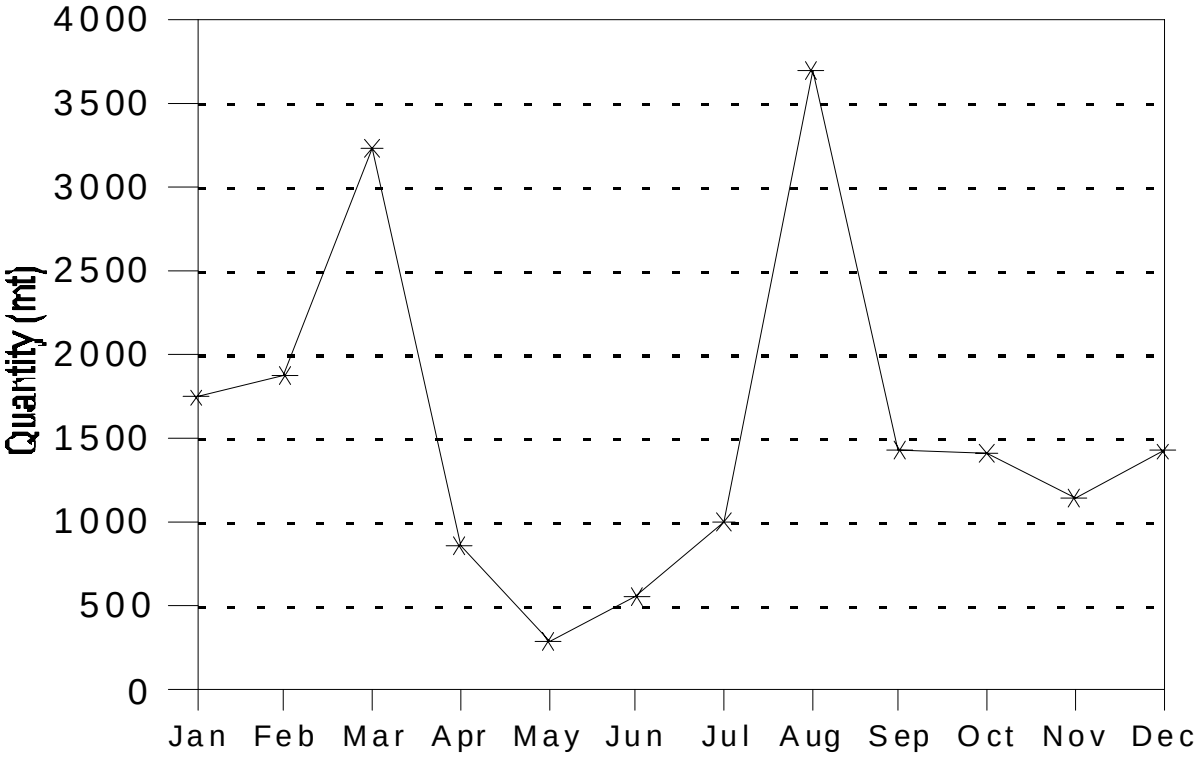
Table 5.2 Monthly Quantity (mt) and Average Price of Maize Traded, 1995/1996

Month	Export		Import	
	Quantity	Price (Tshs/kg)	Quantity	Price (Tshs/kg)
January	1,744	99.1	37	72.0
February	1,885	98.4	4	72.0
March	3,236	112.8	6	79.3
April	859	99.1	16	72.0
May	293	128.3	22	72.0
June	560	89.8	17	52.0
July	996	88.7	5	72.0
August	3,697	70.8	70	72.0
September	1,427	78.5	40	72.0
October	1,415	91.0	25	72.0
November	1,152	76.7	22	72.0
December	1,423	76.6	19	72.0
Total	18,687	92.5*	284	70.9*

* Average Price

Source: Monitoring Data Results, 1995/1996

Fig. 5.1 Maize Exports by Month



of quantity fluctuations for maize exports are shown in Figure 5.1. Both import and export prices are exclusive of transfer and storage charges. These prices are the averages per month for all the monitored sites. Site specific average prices are given in the appendix for all the major informally traded commodities.

Rice

Informal trade of rice also forms a small proportion of national rice production which in the 1992/1993 production year was estimated at between 400,000 and 560,000 metric tons (equivalent to 600,000 to 700,000 tons of paddy rice). The national rice consumption requirement was estimated at 450,000 tons per annum. It is thus apparent that national requirements can only be met in normal production years when weather conditions are optimal. The bulk of the informal trade comprised exports and were destined for all the neighboring countries.

About 1 million metric tons of rice valued at US $4.8 million were exported mainly to Democratic Republic of Congo, Uganda and Zambia, while only 344 metric tons valued at US $198,000 were imported mainly from Malawi and Kenya (Table 5.3).

The production patterns for rice are similar to those of maize and closely follow climatic changes, therefore trade seasonality and trade determinants conform to that of maize. Under normal circumstances, the seasonality pattern of rice is such that prices peak around March/April and are lowest around August/September. The average prices of imports tended to be higher than those of exports with the former averaging Tshs 342 per kilogram and the latter Tshs 295 per kilogram (Table 5.4). The import/export prices have to be cautiously interpreted since rice is only imported through the cross-border points of Sirari and Kyela and the monitored sites are far apart. It is only in May that the export price almost equaled the import price. On the other hand, export quantities remained above the import quantities during the whole year. This trend is consistent with the observed prices. Graphical representation of trade seasonality in rice is given in Figure 5.2.

Table 5.3 Quantity and Value of ICBT in Rice by Site, 1995/1996

Site	Export		Import	
	Quantity (mt)	Value (thousands)	Quantity (mt)	Value (thousands)
Namanga	241	102	---	---
Tanga	13	7	---	---
Horohoro	48	28	---	---
Tarakea	---	---	---	---
Holili	48	19	---	---
Mwanza	276	150	---	---
Sirari	244	3	19	11
Kyela	7	2	323	186
Tunduma	1,013	542	---	---
Kigoma	6,867	3,359	---	---
Mutukula	1,137	560	2	1
Total	9,895	4,771	344	198

Source: Monitoring Data Results, 1995/1996.

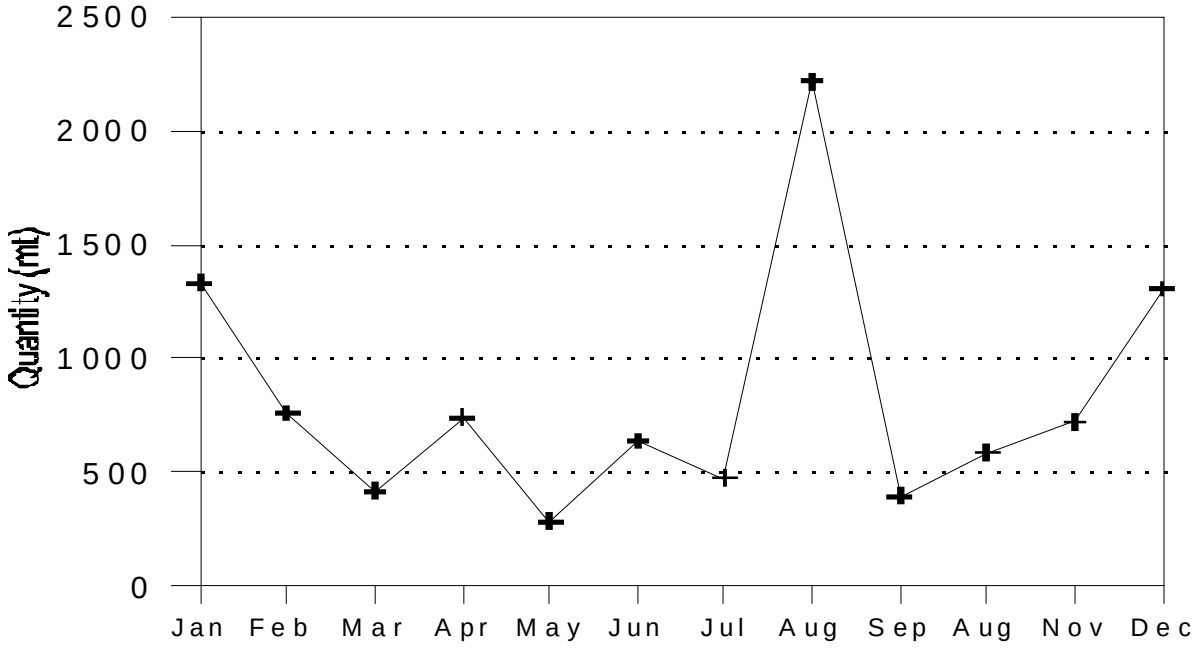
Table 5.4 Monthly Quantity and Average Price of Rice Traded, 1995/1996

Month	Export		Import	
	Quantity (mt)	Price (Tshs/Kg)	Quantity (mt)	Price (Tshs/Kg)
January	1,333	315	19	360
February	762	318	16	358
March	419	314	4	350
April	741	294	1	180
May	285	301	2	342
June	640	290	14	352
July	476	280	8	360
August	2,216	262	75	334
September	396	266	105	347
October	598	277	42	345
November	722	265	20	344
December	1,307	310	37	344
Total	9,895	291*	343	335*

* Average Price

Source: Monitoring Data Results, 1995/1996.

Fig. 5.2 Rice Exports by Month



Wheat Flour

Tanzania's wheat production falls short of its domestic demand and the country is still dependent on wheat imports in order to satisfy the local market. Nearly 50 percent of the wheat is produced in Hanang District of Arusha region. The local wheat production during 1992/1993 was estimated at 70,000 to 80,000 metric tons while the domestic consumption requirement was estimated at 114,000 metric tons per annum (MDB, 1993). Despite the shortfalls in wheat production, 5,000 metric tons of wheat flour whose value was estimated at over US $3.3 million was exported mainly to Democratic Republic of Congo, Zambia and Uganda, while over 1,200 metric tons of wheat flour valued at US $0.6 million were imported principally from Kenya (Table 5.5).

The quantity of wheat flour exports was highest in August while that of imports was highest around September. Fluctuations in prices were not marked (Table 5.6 and Figure 5.3).

Table 5.5 Quantity and Value of ICBT in Wheat Flour by Site, 1995/1996

Site	Export		Import	
	Quantity (mt)	Value (US$ thousands)	Quantity (mt)	Value (US$ thousands)
Namanga	---	---	11	8
Tanga	---	---	37	22
Horohoro	---	---	42	27
Tarakea	---	---	12	5
Holili	---	---	33	14
Mwanza	---	---	---	---
Sirari	---	---	1,073	565
Kyela	2	1	4	3
Tunduma	407	227	---	---
Kigoma	4,402	2,942	---	---
Mutukula	190	132	---	---
Total	5,001	3,302	1,212	644

Source: Monitoring Data Results, 1995/1996.

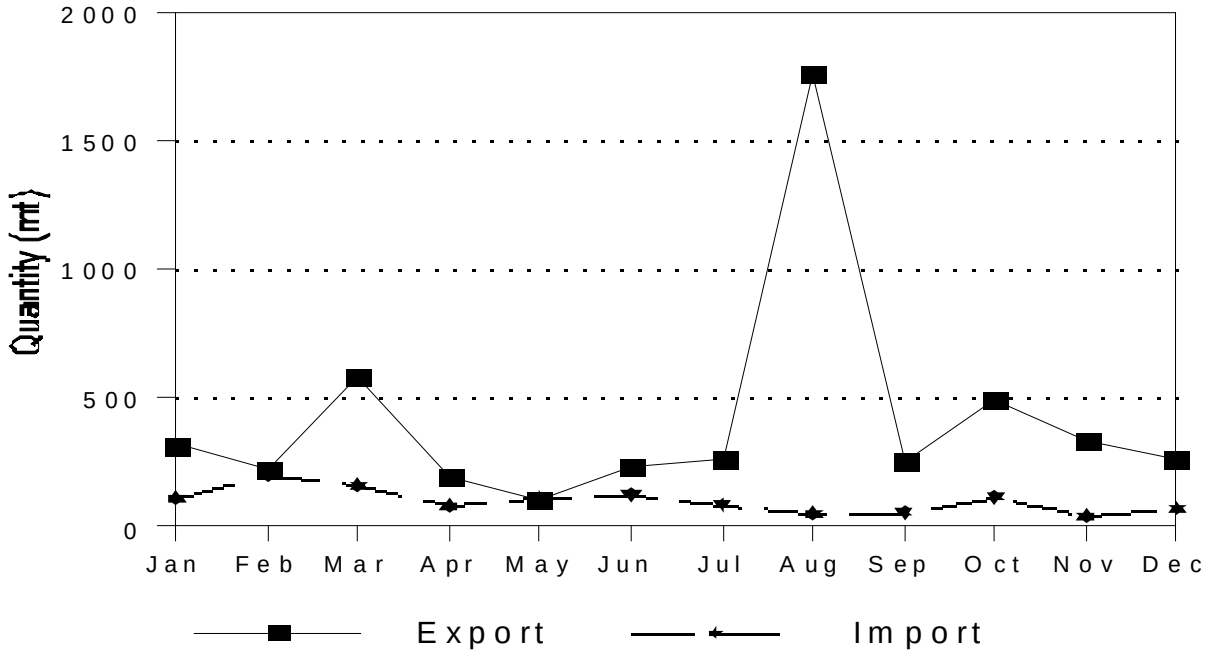
Table 5.6 Monthly Quantity and Average Price of Wheat Flour Traded, 1995/1996

Month	Export		Import	
	Quantity (mt)	Price (Tshs/kg)	Quantity (mt)	Price (Tshs/kg)
January	318	359	111	317
February	224	277	201	300
March	580	330	163	333
April	190	333	80	299
May	102	373	110	311
June	236	382	127	301
July	263	385	85	306
August	1,755	323	51	263
September	249	344	56	257
October	491	334	115	268
November	328	357	44	281
December	265	365	70	285
Total	5,001	347*	1,213	293*

* Average Price

Source: Monitoring Data Results, 1995/1996.

Fig. 5.3 Quantity of Wheat Traded by Month



Sugar

Sugar marketing was previously the responsibility of the Sugar Development Corporation (SUDECO) from 1977 up to 1991 when the corporation's monopoly ceased following market liberalization in Tanzania. Private traders can now also import sugar from outside, principally, Thailand. The Southern Highlands, which include Iringa and Mbeya, are mainly supplied with sugar from Zambia and Malawi while Mwanza and Mara regions get some of their sugar from Kenya.

The main problems in Tanzania's sugar industry include under capacity utilization, high input costs and operational problems which have led to low delivery of cane to the factories resulting in decreased output. There are also sugar distributional problems emanating from inadequate and unreliable transport as well as inadequate storage facilities which are poorly located.

Cross-border trade of sugar was quite vibrant especially along the borders with Malawi and Zambia. About 13,300 metric tons of sugar valued at US $9.4 million were imported from Zambia, Malawi and Kenya. However, Tanzania also informally exported about 2,400 metric tons valued at US $1.8 million mainly to the Democratic Republic of Congo, Kenya and Uganda (Table 5.7). Some sugar exports were, however, also made to Zambia during the same time possibly due to the fact that Malawi was enforcing strict restrictions on agricultural commodity exports along the Zambia/Malawi border.

The quantity of sugar informally imported was erratic but fluctuations in quantity exported were moderate and not showing obvious seasonal trends. There were no pronounced fluctuations in average prices observed, although export price was above import price throughout the year (Table 5.8 and Figure 5.4). Most of the sugar trade could be described as contraband; Malawi, for example, had export restrictions on it at the time of our field survey.

Table 5.7 Quantity and Value of ICBT in Sugar by Site, 1995/1996

Site	Export		Import	
	Quantity (mt)	Value (US$ thousands)	Quantity (mt)	Value (US$ thousands)
Namanga	416	263	10	6
Tanga	14	11	50	38
Horohoro	---	---	14	12
Tarakea	---	---	210	150
Holili	36	24	22	14
Mwanza	---	---	---	---
Sirari	272	199	908	716
Kyela	---	---	5,048	2,995
Tunduma	77	53	6,995	5,545
Kigoma	1,189	861	---	---
Mutukula	427	387	---	---
Total	2,431	1,798	13,257	9,476

Source: Monitoring Data Results, 1995/1996.

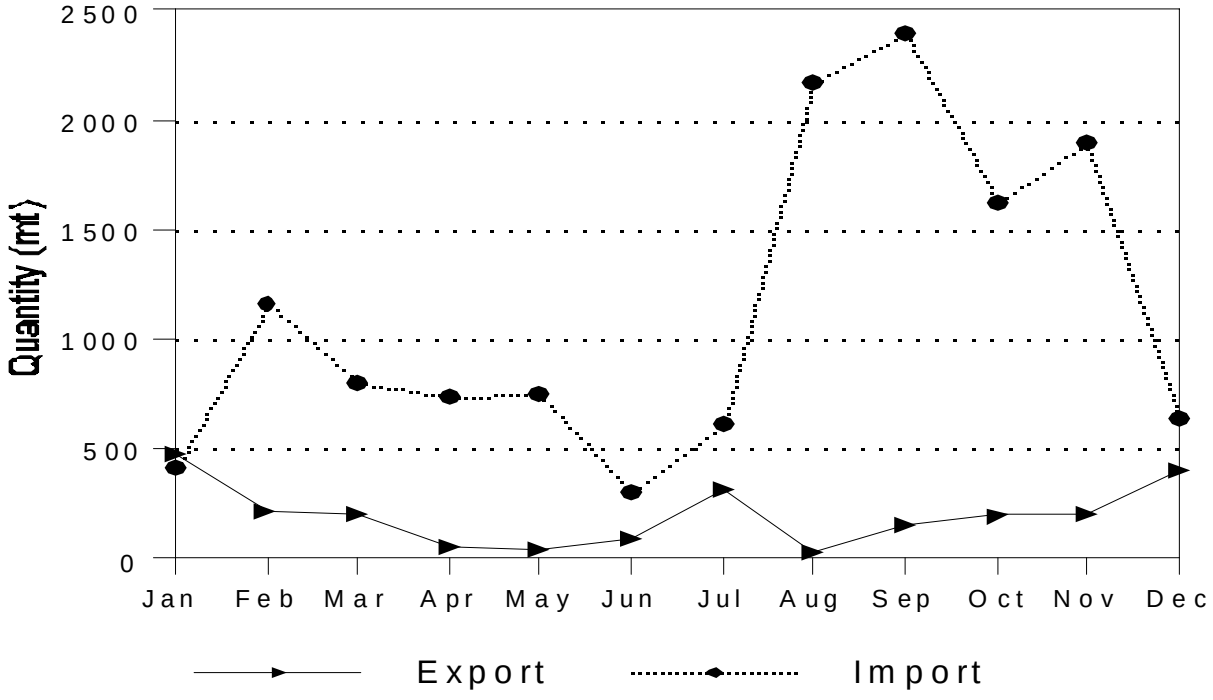
Table 5.8 Monthly Quantity and Average Price of Sugar Traded, 1995/1996

Month	Export		Import	
	Quantity (mt)	Price (Tshs/Kg)	Quantity (mt)	Price (Tshs/Kg)
January	478	467	415	386
February	221	465	1,163	404
March	204	445	797	390
April	54	428	743	366
May	49	419	474	371
June	98	416	308	374
July	321	417	619	364
August	36	432	2,169	366
September	155	371	2,398	366
October	199	411	1,626	345
November	208	420	1,899	363
December	408	425	645	374
Total	2,431	426*	13,256	372*

* Average Price

Source: Monitoring Data Results, 1995/1996.

Fig. 5.4 Quantity of Sugar Traded by Month



Pulses

Beans were the most important commodity in the category of pulses. The importance of beans in recent years stems from the continuing increases in the prices of other major protein sources namely beef and fish. The major producing areas for beans in Tanzania are Kagera, Shinyanga, Iringa, Kigoma, Mbeya, Arusha and Kilimanjaro. The production is meant for home consumption but is increasingly becoming a major income earner.

Tanzania informally exported beans to all her neighbors and, during the period under review, about 8,000 metric tons of beans valued at US $4 million were exported compared with imports amounting to only 9 metric tons valued at US $3,000. The major importers of beans (and other pulses) from Tanzania were the Democratic Republic of Congo, Kenya and Zambia, while Tanzania imported small quantities of the same commodity from Mozambique[7], Malawi and Uganda, as shown in Table 5.9.

Estimates of the Marketing Development Bureau (MDB) indicate that production of pulses during 1992/1993 was 507,000 tons. Cross-border trade of beans therefore constitutes less than 1.6 percent of the country's total production of pulses. However, informal trade of beans should not just be looked at in terms of this proportionality but rather in terms of the role it plays in the importing countries. Beans were exported to the neighboring countries in exchange for value-added consumable goods such as detergents, sugar, beer and cooking fats, just to mention a few.

Table 5.9 Quantity (mt) and Value (US$ thousands) of ICBT in Beans by Site, 1995/1996

	Export		Import	
Site	Quantity (mt)	Value (US$ thousands)	Quantity (mt)	Value (US$ thousands)
Namanga	1,901	669	---	---
Tanga	24	11	---	---
Horohoro	14	9	---	---
Tarakea	75	15	---	---
Holili	122	35	---	---
Mwanza	---	---	---	---
Sirari	6	2	---	---
Kyela	327	117	7	2
Tunduma	1,108	1,155	---	---
Kigoma	4,376	2,008	---	---
Mutukula	24	8	2	1
Total	7,977	4,030	9	3

Source: Monitoring Data Results, 1995/1996.

The production pattern for beans follows that of other cereals particularly maize, and trade seasonality is thus consistent with that pattern. Larger export volumes naturally do occur after the harvesting season which lasts from May to July. The highest quantity exported was in August when 1,600 metric tons were exported. The average export price was Tshs 209 per kilogram, while the average import price was Tshs 184 per kilogram. The average export price was lowest during the May to June period (Table 5.10). Figure 5.5 shows the trade seasonality in beans.

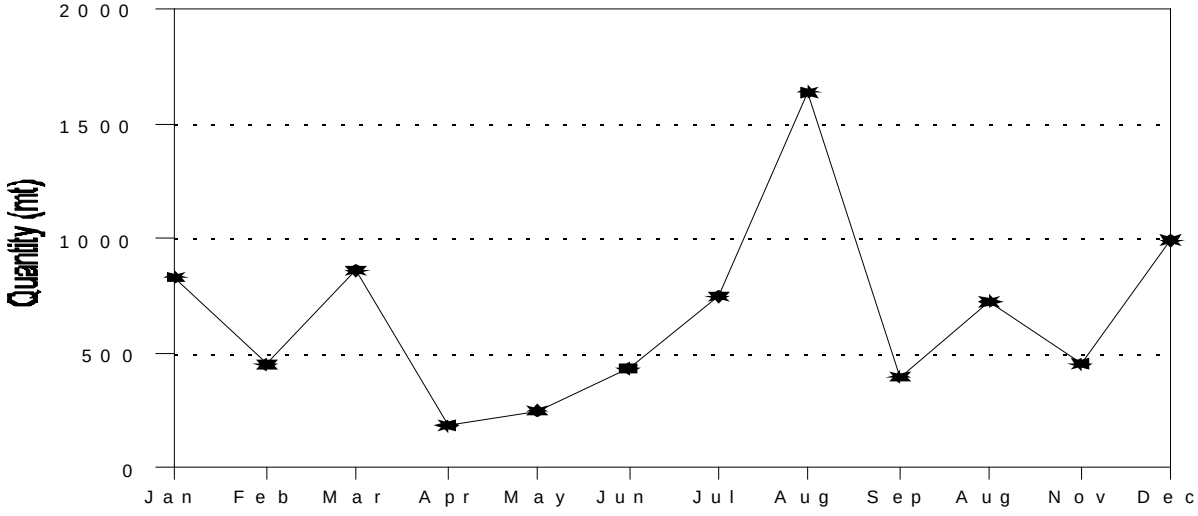
Table 5.10 Monthly Quantity (mt) and Average Price of Beans Traded, 1995/1996

Months	Export Quantity	Export Price (Tshs/kg)	Import Quantity	Import Price (Tshs/kg)
January	833	241	2	400
February	452	268	--	---
March	862	274	--	---
April	186	219	--	---
May	251	166	--	---
June	434	162	1	130
July	748	205	--	---
August	1,639	220	1	153
September	399	195	2	165
October	726	183	--	130
November	454	202	--	---
December	993	170	2	130
Total	7,977	209*	8	184*

* Average Price

Source: Monitoring Data Results, 1995/1996.

Fig 5.5. Beans Exports by Month



Root Crops

Another important set of crops grown in Tanzania are the root crops, also known generally as tubers. The important ones in this category are cassava, sweet potatoes and Irish potatoes. Over 5,400 metric tons of these commodities valued at over US $1.5 million were informally exported to the neighboring countries, while only 87 metric tons, valued at US $25 thousand, were imported. The major importers of Tanzania's root crops were the Democratic Republic of Congo, Zambia and Malawi. Table 5.11 shows the quantity and value of root crops traded by site between Tanzania and her neighboring countries.

Root crops are drought-resistant and are the staples in the drier regions, but act as important food alternatives in wetter areas during crop failure due to transitory drought. Most of these crops are harvested throughout the year and therefore fluctuations in trade are usually expected to be moderate. The export peak observed in August is due to factors such as the prevailing demand situation in the importing countries rather than seasonality in production.

Table 5.11 Annual Quantity and Value of ICBT in Root Crops by Site

Site	Export		Import	
	Quantity (mt)	Value (US$ thousands)	Quantity (mt)	Value (US$ thousands)
Namanga	---	---	1	2
Tanga	55	18	2	0.01
Horohoro	20	4	–	---
Tarakea	---	---	–	---
Holili	---	---	–	---
Mwanza	---	---	–	---
Sirari	9	2	75	22
Kyela	342	51	6	1
Tunduma	576	66	2	0.2
Kigoma	4,403	1,391	--	---
Mutukula	2	---	1	0.2
Total	5,406	1,532	87	25.4

Source: Monitoring Data Results, 1995/1996.

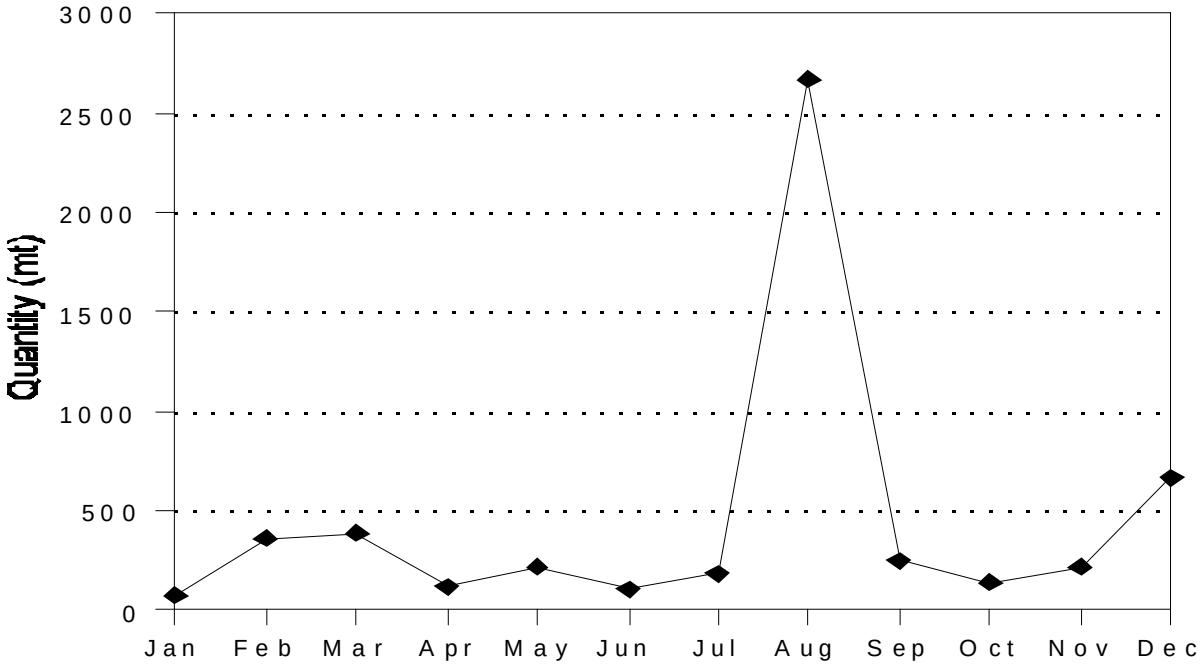
Table 5.12 Monthly Quantity and Average Price of Root Crops Traded, 1995/1996

Month	Export		Import	
	Quantity (Tshs/kg)	Price (mt)	Quantity (Tshs/kg)	Price (mt)
January	77	108	1	150
February	363	137	2	1,556
March	390	103	2	300
April	122	72	3	133
May	217	109	---	150
June	108	70	2	150
July	184	65	3	144
August	2,671	161	8	133
September	248	101	13	446
October	141	99	35	278
November	218	357	9	281
December	668	210	10	160
Total	5,407	133*	88	323*

* Average Price

Source: Monitoring Data Results, 1995/1996.

Fig. 5.6 Exports of Root Crops by Month



Millet

Bulrush and finger millet are drought-resistant crops, which act as important foodstuffs in drylands. Tanzania was found to be a net importer of millet originating from Zambia. Other sources were Uganda and Malawi. About 400 metric tons of millet whose value was estimated at US $105,000 were imported. Approximately 32 metric tons of millet valued at US $3,000 were informally exported to Kenya (Table 5.13). Although drought resistant, its production pattern is similar to that of other cereals already discussed and the trend in seemed to follow this production pattern. The trade seasonality is depicted in Table 5.14 and Figure 5.7.

Table 5.13 Quantity and Value of ICBT in Millet by Site, 1995/1996

Site	Export		Import	
	Quantity (mt)	Value (US$ thousand)	Quantity (mt)	Value (US$ thousand)
Namanga	---	---	---	---
Tanga	---	---	---	---
Horohoro	---	---	---	---
Tarakea	---	---	---	---
Holili	---	---	---	---
Mwanza	14	0.6	---	---
Sirari	15	2	---	---
Kyela	3	0.3	6	1
Tunduma	---	---	381	102
Kigoma	---	---	---	---
Mutukula	---	---	9	2
Total	32	3	396	105

Source: Monitoring Data Results, 1995/1996.

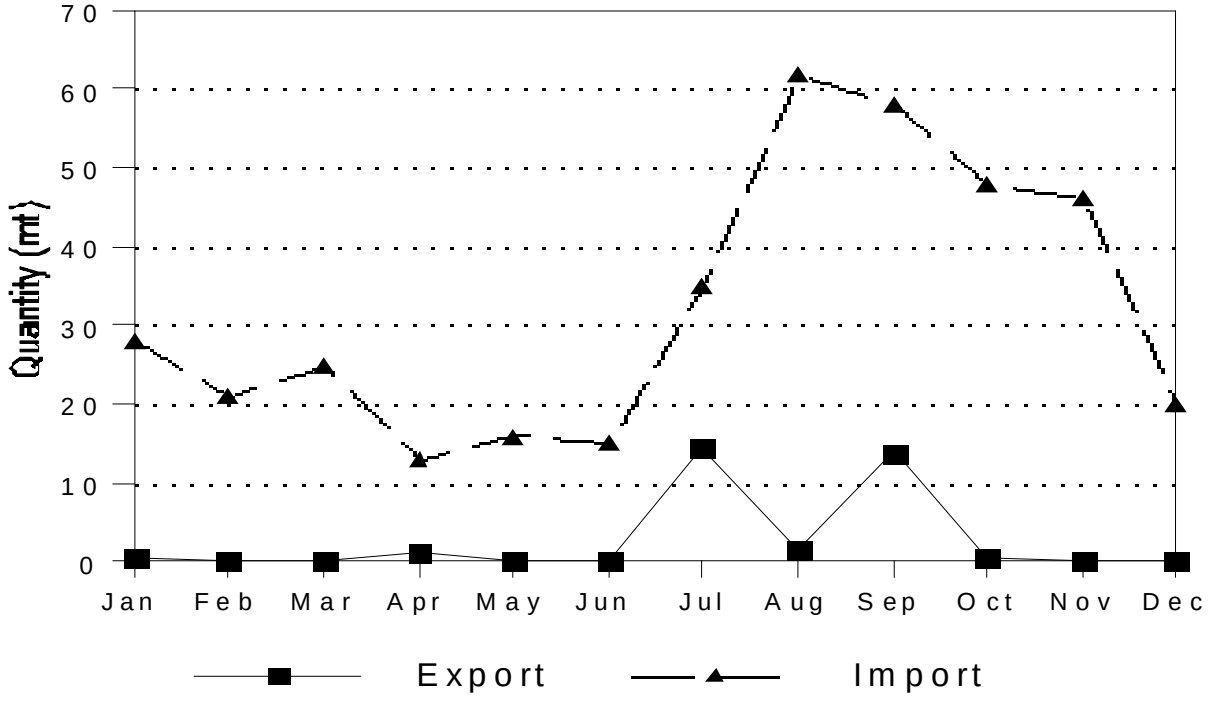
Table 5.14 Monthly Quantity and Average Price of Millet Traded, 1995/1996

Month	Export		Import	
	Quantity (mt)	Price (Tshs/Kg)	Quantity (mt)	Price (Tshs/Kg)
January	0.4	160	28	184
February	---	---	21	203
March	---	---	25	178
April	1.3	160	13	177
May	---	---	16	135
June	---	---	15	130
July	14.4	100	35	130
August	1.5	130	62	141
September	13.9	---	58	134
October	0.4	160	48	135
November	---	---	46	145
December	---	---	29	140
Total	32	142*	396	153*

* Average Price

Source: Monitoring Data Results, 1995/1996.

Fig. 5.7 Quantity of Millet Traded by Month



Fish

Fish was one of the major commodities traded informally along the borders of Tanzania. Although the movement was in both directions, exports were the most predominant. About 54,000 metric tons of different fish species whose value was estimated at US $67 million were exported to neighboring countries, whereas only 73 metric tons valued at US $190,000 were imported informally into Tanzania. Imports came from both Malawi (Table 5.15) and Mozambique (Macamo, 1997).

The bulk of fish exports went through the ports of Mwanza and Kigoma on Lakes Victoria and Tanganyika, respectively. Other border points registered low or no trade at all. Fishing occurs throughout the year and trade in this commodity is expected to have minimal fluctuations in both quantity and price. The average price ranged between Tshs 500 and Tshs 1,000 per kilogram depending on the type (species) and the form of fish traded (Table 5.16). Figure 5.8 shows the seasonality in fish trade.

Fish is the main source of proteins for lake region communities, and fishing activities constitute a major economic activity around those areas judging by the sheer number of people involved in the business. Although the fishing industry around Lakes Victoria and Tanganyika generate billions of shillings annually through exports to the international market, the benefits do not seem to trickle down to the grass-roots level. With the advent of trade liberalization, fish trading has become highly concentrated and vertically integrated with processors having their agents around the landing beaches. Poor capital base and a lack of a well-structured cooperative movement, hinder the local small fishermen from adopting modern fishing techniques and installing cold storage facilities, which entail expensive investment and maintenance costs.

Table 5.15 Quantity and Value of Fish Traded by Site, 1995/1996

Site	Export		Import	
	Quantity (mt)	Value (US$ thousands)	Quantity (mt)	Value (US$ thousands)
Namanga	---	---	--	--
Tanga	2	2	--	--
Horohoro	4	2	--	--
Tarakea	---	---	--	--
Holili	---	---	--	--
Mwanza	1,404	839	--	--
Sirari	38	65	--	--
Kyela	20	51	73	190
Tunduma	45	115	--	--
Kigoma	53,090	66,195	--	--
Mutukula	5	2	--	--
Total	54,608	67,271	73	190

Source: Monitoring Data Results, 1995/1996.

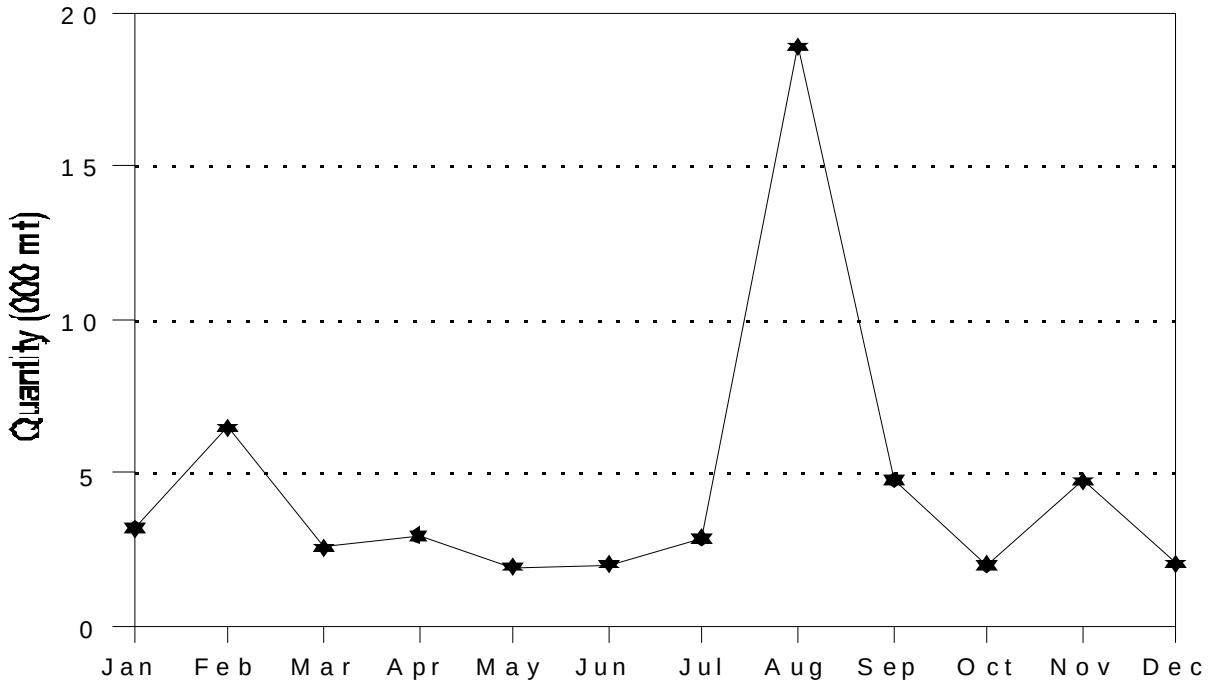
Table 5.16 Monthly Quantity and Average Price of Fish Traded, 1995/1996

Months	Export		Import	
	Quantity (mt)	Price (Tshs/Kg)	Quantity (mt)	Price (Tshs/Kg)
January	3,209	777	11	1,500
February	6,486	586	1	1,500
March	2,588	758	1	567
April	2,957	817	1	1,450
May	1,941	702	---	---
June	2,043	675	1	1,500
July	2,879	733	---	---
August	18,904	692	21	1,450
September	4,776	944	15	1,500
October	2,018	923	6	1,500
November	4,738	856	6	1,500
December	2,068	639	10	1,500
Total	54,607	759*	73	1,397*

* Average Price

Source: Monitoring Data Results, 1995/1996.

Fig.5.8 Fish Exports by Month



Many vital questions about the viability of the industry remain unresolved. High on the list of concerns is the prevalence of the water weed, hyacinth, (especially in Lake Victoria) which is not only fast multiplying and thus threatening exploitation of the lake's resources but could also lead to depletion of fish species. Other factors which hinder the prosperity of the industry are poor road and telecommunication infrastructures, frequent power shortages, high cost of standby generators, inadequate supply of water by local government authorities and high cost of telephone services. Delays in import/export documentation and high taxes are other disincentives that require attention by policy makers. The problems extend to overseas consumer countries most of which still practice market protectionism, not by tariff measures but under the guise of product contamination. For instance, early 1997, an outbreak of cholera in the great lakes region triggered off a ban of fish exports from the region to the European Union markets; the matter had not been effectively and amicably concluded at the time of publication of this report.

Although the processors make the most out of the fish industry, they too contend with the salient but by no means simple issues as do the local fishermen. Despite the myriad of problems plaguing the fish industry, fishing activities constitute an important occupation for the community living around lake shores and need protection from the exploitative activities of the processors. What is required then is to put in place policies that will make cross-border trade less risky and avail capital to the small fishermen since these appeared to be the major constraining factors. Possibilities include eliminating taxes/duties on fish exports as they are too high for the ordinary traders to afford. As a famous American economist said when referring to incentives: If you want less of something, tax it. If you want more, subsidize it.

6. Summary, Conclusions and Policy Implications

SUMMARY AND CONCLUSIONS

This study reveals that cross-border trading along Tanzania's border is dominated by male adults residing mainly in border towns. These traders were typically small in their operations, dealt in small quantities of a variety of commodities as a risk management strategy, and showed little specialization in the marketing functions they performed. Since many of the traders operated informally and had no tangible assets, they were generally unable to access financial facilities from the formal sector.

The majority of the traders relied on hired transport and storage facilities, but occasionally organized themselves to share the costs of a rented truck. Due to the nature of the informal cross-border trade, long-term storage was hardly needed and the storage that was undertaken ordinarily occurred at sites close enough to informal trade routes. Bulky loads were broken down into smaller units not just to facilitate safe carriage across the border but also to minimize risks in case of confiscation by security personnel and customs authorities. Surveillance by the latter was found to be ineffective in deterring tax evasion by informal traders, partly because most of the countries did not have the necessary resources and infrastructure needed to monitor the informal passages, and partly because there was an apparent lack of impartial motivation to pursue tax offenders.

Generally, there was no systematic information dissemination, but instead, trade practitioners relied on inter-personal communication amongst themselves and their customers. Transactions were mainly on a cash basis with the foreign exchange requirements being met from well-established parallel markets. It is worth noting, however, that convertible currencies played a minor role in cross-border trade transactions because one of the local currencies invariably predominated as a medium of exchange.

Informal cross-border trade activities between Tanzania and the neighboring countries involved an exchange of large volumes of both agricultural and non-agricultural commodities. The country's exports mainly comprised agricultural commodities, whereas the majority of her imports derived from value-added services from neighboring countries' industrial sectors, or re-exports from a third country.

The main agricultural exports were unmilled maize, beans, rice, wheat flour and also fish which was placed in this broad category. The main agricultural import was sugar. Most of the agricultural commodities were both exported and imported, largely due to Tanzania's large size, coupled with poor transport and distribution networks. Producers therefore sold their commodities to those markets (foreign ones) that afforded them higher returns, while consumers sourced their supplies from markets (also foreign ones) that offered relatively low prices. The Democratic Republic of Congo (DRC) and Kenya were the leading importers of agricultural commodities from Tanzania.

The major informal industrial imports were new textiles, toiletries, cooking fats and margarine. Petroleum products constituted 67 percent of Tanzania's total industrial exports. The bulk of these products were destined for landlocked DRC and Uganda. The major trading partners with Tanzania in industrial manufactures were the DRC and Kenya. The main industrial import from the DRC was new textiles, constituting 87 percent of total industrial imports, while the main imports from Kenya were cooking fats and toiletries.

Tanzania's overall informal trade with all her neighbors for both agricultural and non-agricultural commodities amounted to US $277.1 million during the 1995/1996 period, with overall trade balance equaling US $74.1 million in favor of Tanzania. The total value of informal imports in the same period was US $101.5 million, while exports totaled US $175.6 million. With reference to specific countries, Tanzania's informal

cross-border trade balance was positive with respect to Uganda, the DRC and Mozambique, and was negative with respect to Kenya, Zambia and Malawi.

According to the IMF's Direction of Trade Yearbook (1996), Tanzania's annual official trade (both exports and imports) for the year 1995 was US $2,378 million which was significantly higher than informal cross-border trade for the year 1995/1996. In other words, ICBT was about 12 percent of the official trade. During the same period (1995), Tanzania's official regional trade (trade with her neighbors) amounted to US $204 million which by comparison was about 73 percent of ICBT. Alternatively, ICBT was 136 percent of the official regional trade for the year 1995/1996. Overall, ICBT formed 58 percent of the total (both official and unofficial) regional trade.

The determinants of the informal cross-border trade of agricultural goods included variations in rainfall and climate, past and present policies, distances to factor and commodity markets, and infrastructure. For the industrial goods, although the forces of supply and demand played their traditional price and distribution roles, the need to balance trade of food and industrial goods also played a critical role, with barter exchange between these two categories being noted at some of the borders. Bye and large, trade flows conformed to the underlying comparative as well as competitive advantages of the trading partners.

The findings of this study confirm that the countries in the region are complementarity in terms of economic interest and trade exchange. For example, Tanzania has a high potential for export growth, particularly in the supply of food crops to neighboring countries such as Kenya because the country has a wide range of agro-climatic zones and the land resource is not yet a major constraint to production. Kenya on the other hand is relatively more industrialized and could therefore put more emphasis on the regional market for manufactured products.

This study has also shown that most of the agricultural commodities were being imported and exported at the same time but at different border points. This was a reflection of the country's extensive border and the poor infrastructure which makes internal distribution of goods cumbersome and costly. Transport costs to and from the main internal markets are invariably higher relative to foreign neighboring areas. Producers and consumers therefore sell to and source their tradables from cross-border markets, respectively. Due to this interdependance, banning of food exports because of production shortfalls and preventing normal border trading can have adverse economic impacts particularly on populations living in the border regions. Further analyses need to be done to explore the social costs of export bans and whether or not such actions achieve their desired objectives.

POLICY IMPLICATIONS

Cross-border trade, especially in agricultural food commodities, is wide spread but largely unrecorded. These trade activities may be legal on one side of the border but illegal on the other. However, this form of trade plays an important food security role of moving foodstuffs from surplus to deficit areas. Informal cross-border trade thus stabilizes food availability by improving the supply through importation and increased production through export. It provides employment and hence income as most of the informal traders are not gainfully employed in the formal sector where opportunities continue to dwindle. Informal cross-border trade also complements formal trade in the agricultural marketing system and enhances efficiency in marketing by competing with official trade.

The existence of unrecorded trade on a significant scale may have important fiscal implications. For example, government budgets may be adversely affected since most developing countries derive their revenue from taxes, part of which comes from international trade. The biased national accounts which arise because of the exclusion of unrecorded trade could easily mislead planners particularly with respect to resource allocation and thrust of international relations and trade policies. One area of concern in this regard has been the governments' penchant for import/export bans and reluctance to liberalize cross-border trade, especially at times of domestic shortfalls in production. Policy makers have consistently reneged on their regional commitments to trade

liberalization thereby opening avenues for cross-border smuggling and rent seeking practices by public officials who control international trade activities.

Perceived loss of revenue has in the past proved to be a serious stumbling block in the implementation of policies aimed at cross-border trade liberalization. There are fears, at least in the minds of the region's political leadership, that more open borders may occasion undue loss in tax revenue. But such fears relate more to short term cash flows while mistakenly discounting the efficiency and economic benefits that open international trade offers. There are also fears that more open borders could encourage trade of contraband and violations of phytosanitary requirements. Although these are valid concerns, it is contended that regional policy harmonization of standards and regulations for transit cargo could obviate the need for many of the current *ad hoc* and unilateral rules imposed by individual countries. Such rules are rarely enforcable beyond the borders of the country imposing them, yet they are intended to regulate trade flows to those destinations. For example, a Kenyan ban on the export of maize is meaningless unless the authorities in Tanzania and Uganda cooperate. Similarly, phytosanitary requirements imposed by Zambia to curb the spread of grain borers associated with imports of grains from Tanzania are only enforcable if the latter country collaborates in the inspection procedures.

The prevalence of unrecorded trade in the region, even when most of the countries have undertaken trade reforms, points to a lack of political will and commitment to a favorable macroeconomic environment conducive to free intra-regional trade. Formal cross-border trading is still constrained by high tariffs and non-tariff barriers, such as long and cumbersome documentation procedures, instability of the foreign exchange rates, harassment of the traders by the agents of economic police, high transportation costs and lack of working capital and credit facilities. These bottlenecks have to be reduced, and, if possible, completely removed, in order for the regional markets to integrate and operate more efficiently.

Besides the above mentioned issues relating to trade liberalization and policy harmonization, there are infrastructural and marketing challenges to increasing regional trade and assuring a food secure region. Even in cases where price and other policy distortions do not exist, large proportions of non-tradable production still exists due to high transactions costs. Lowering of these costs through investment in improved transportation and storage infrastructure and marketing facilities may be as important in lowering food prices to consumers as increasing agricultural productivity. The unrecorded trade statistics presented in this report do emphasize the point that although cross-border trade is highly volatile, it nonetheless conforms to the theory of comparative advantage. But the poor state of infrastructure, particularly the poor road networks in Tanzania, hampers producers' opportunities to expand and diversify their production by exploiting the neighboring countries' export markets. Although the required investments on infrastructural development are admittedly colossal, stakeholders consulted during our survey were of the strong opinion that Tanzania ought to explore more vigorously, the alternative strategies that target infrastructure as a means of exploiting the existing comparative advantages, particularly in the area of food production and export. The current food self-sufficiency strategies, which are also the pillars of food security in the neighboring countries such as Kenya and Uganda, are shortsighted and must be seriously reassessed in a regional rather than domestic context.

Finally, the results of this study have demonstrated that, given the right incentives, the private sector can play a very significant role in moving food from producers to consumers (even to drought-stricken lands and areas of civil strife), the political boundaries and bureaucratic constraints notwithstanding. The mistrust that appears to exist between policy makers (government) and the private sector practitioners, as well as the hindrances to trade that are persistently imposed by the latter, sometimes gives the impression that these two parties have self-neutralizing views regarding economic development and social welfare. The view adopted here, and which we urge regional governments to consider seriously, is that the private sector should be enabled through conducive macroeconomic environment and predictable policy regimes to play a more active role of intra-regional trading and income generation. The goals of national food security are indeed not incompatible with this notion, even when there are threats of domestic market failure arising from natural

disasters such as droughts. Strong governments as well as consistency and predicability of policy are critical ingredients that the region's entrepreneurs need so desperately in order to function efficiently and for the food insecurity problem to be eradicted comprehensively.

Notes

1 Details can be found in Ackello-Ogutu, "Methodologies for Estimating Informal Cross-Border Trade in Eastern and Southern Africa", SD Publication Series, Office of Sustainable Development Bureau for Africa, USAID, 1995.

2 Other refers to the monitoring of the movement of agricultural commodities at the borders; administrative duties; facilitating government policy of trade liberalization; providing relevant information on quality, demand and supply situations; and issuance of permits, health and quality control.

3 These are customs officials and security personnel.

4 Other measures likely to have positive impact on cross-border trading include further decentralization of import/export licensing, shortening the bureaucratic procedures as well as easing the conditions for the issuance of licenses, an end to the harassment of traders, rationalization of trade polices, facilitation of currency convertibility and informal trade formalization.

5 Official trade figures were sourced from IMF, Direction of Trade Statistics Yearbook, 1996.

6 Fish was leading in both quantity and value but is not considered as a staple food in the region.

7 Source: Macamo, 1997.

8 Mainly bar soap and toilet paper.

9 Tanzania's Pilsner and Simba, Kenya's Tusker and South Africa's tinned Castle lager.

10 Toothpaste and cosmetics.

11 Rhino, Mosi and Ndola.

12 Traditional beer was exported, while Carlsberg was imported. Spirit exports was konyagi and imports was power No. 1.

13 These are second hand (used) clothes popularly known as *mitumba* in the region.

14 Main ones are toilet paper, bar soap, detergents and toothpaste and brushes, but Tanzania imports cosmetics from Malawi.

15 Tanzania mainly exported sweets to Malawi and imported biscuits from Malawi.

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Appendix A

Estimates of the Informal Cross-Border Trade

TRADE WITH KENYA

Exports and Imports of Agricultural Products and Fish

Tanzania's informal exports to Kenya were mainly agricultural food commodities and fish. The major agricultural exports in physical terms were maize (5,915 metric tons), beans (2,143 metric tons), fish (1,447 metric tons), rice (870 metric tons), root crops (850 metric tons) and sugar (738 metric tons). However, fish, maize and beans were the major exports in value terms with US $909 thousand, US $851 thousand and US $741 thousand, respectively. Sugar followed with US $497 thousand and rice with US $308 thousand. Other agricultural exports were millet, bananas, fruit (mainly oranges), groundnuts, maize meal and livestock (Table A.1).

Wheat flour and sugar were the major informal agricultural food commodity imports from Kenya with sugar leading in both physical and value terms (Table A.1). Other food imports were bread, rice, milk and root crops. Some of the commodities (for example, milk, sugar, root crops and rice) were moving in either direction, as can be seen from Table A.1. Tanzania was a net exporter of all, except milk and sugar, among this category of commodities. The milk that was being exported was whole fresh milk, while imports constituted Kenya's processed ultra-heat treated (UHT) milk.

Table A.1 Informal Trade in Foodstuffs between Tanzania and Kenya, 1995/1996

Commodity	Exports		Imports	
	Quantity (mt)	Value (US$ thousands)	Quantity (mt)	Value (US$ thousands)
Maize	5,915	851	---	---
Beans	2,143	741	---	---
Fish	1,447	909	---	---
W/flour	---	---	1,208	641
Bread	---	---	104	95
Root crops*	850	25	787	24
Sugar	738	497	1,214	937
Rice	870	308	19	11
Bananas	156	11	14	3
Millet	29	3	---	---
Fruit**	365	17	---	---
Maize meal	147	34	25	8
G/nuts	61	30	---	---
Livestock		118	---	---
Milk		16		153
Coffee		---		2
Other***		747		77
Total	12,721	4,307	3,371	1,951

* Root crops include cassava, Irish and sweet potatoes.
** Fruit includes citrus, pineapples, lemon and passion fruit.
*** Other include: ***exports***–cotton seeds and seed cake, tomatoes, onions, hides and skins; ***imports***–carrots, plums, cashewnuts and coconuts.

Source: Monitoring Survey Data, 1995/1996.

Exports and Imports of Industrial Products and Forest Resources

Informal trade data in industrial goods between Tanzania and Kenya shows movement in both directions for most of the commodities but trade-favored Kenya's industrial exports to Tanzania amounted to over US $9.6 million against imports worth about US $3 million. Tanzania's informal imports from Kenya were mainly industrial or value added goods. The main imports in value terms were cooking fats/oils (US $2.2 million), toiletries (US $1.8 million), petroleum products (US $1.8 million), beer (US $0.6 million), margarine (US $0.6 million), car and bicycle parts (US $0.6 million) and sweets and biscuits (US $0.5 million), as shown in Table A.2. Other imports of significant value were salt, soft drinks, construction materials (cement and corrugated iron sheets), new textiles, charcoal and timber all valued at over US $0.5 million.

Of significant value among exports were car and bicycle parts, beer and spirits (mainly konyagi), charcoal and timber, toiletries (mainly cosmetics) and petroleum products all valued at about US $0.3 million. These are also shown in Table A.2. Other exports were construction materials, new textiles and soft drinks. South Africa's tinned beer was among the beer imports through Kenya. Tanzania was found to be a net importer of all industrial manufactures, but a net exporter of forest products–timber and charcoal.

Table A.2 Value of ICBT in Industrials between Tanzania and Kenya, 1995/1996

Commodity	Value of Exports (US$ thousands)	Value of Imports (US$ thousands)
Cooking Fats/Oils	---	2,159
Margarine	---	578
Toiletries	29	1,792
Petroleum Products	17	1,756
Beer & Spirits	70	603
Soft Drinks	5	78
New Textiles	8	14
Electronics	---	1
Const. Materials	12	72
Sweets & Biscuits	---	538
Car & Bicycle Parts	115	572
Charcoal & Timber	47	8
Salt	---	345
Other*	2,556	1,120
Total	2,859	9,636

* Other refers to: ***imports***–kitchenware, old newspapers, drugs, match boxes, plastics, exercise books, spices, cigarettes, dry cells, paint, shoe polish and creams, umbrellas, mattresses, kerosine lamps, knitting thread, jam, sandals and insecticides; ***exports***–candles, shoes, aluminium scraps and pesticides.

Source: Monitoring Survey Data, 1995/1996.

TRADE WITH UGANDA

Exports and Imports of Agricultural Products and Fish

The main agricultural food exports observed were: 1.1 thousand metric tons of rice valued at about US $0.6 million, 427 metric tons of sugar estimated at about US $0.4 million, and 190 metric tons of wheat flour worth about US $0.1 million. Others were bananas, maize, maize meal, beans, fish and root crops all valued at about US $0.1 million. Coffee, however, had the highest value among informally exported agricultural commodities from Tanzania to Uganda with the value of about US $1.1 million. Agricultural informal imports from Uganda, which were relatively insignificant, included sorghum, beans, bread, tubers, rice and coffee (Table A.3). Tanzania was therefore a net exporter of agricultural food commodities to Uganda.

Exports and Imports of Industrial Products and Forest Resources

Table A.4 shows that the major industrial goods in value terms informally exported from Tanzania to Uganda were petroleum products (US $400 thousand), soft drinks (US $75 thousand), car and bicycle parts (US $58 thousand), cooking fats (US $51 thousand), new textiles (US $50 thousand) and beer and spirits (US $30 thousand). Timber and charcoal were also exported informally and their combined value was US $24 thousand. All major exports except beer/spirits, soft drinks, charcoal and timber were re-exports.

Among the imports, new textiles had the highest value of about US $0.6 million. Other informal imports were toiletries (over US $0.5 million), salt (about

Table A.3 Informal Trade in Foodstuffs between Tanzania and Uganda, 1995/1996

Commodity	Exports		Imports	
	Quantity (mt)	Value (US$ thousand)	Quantity (mt)	Value (US$ thousand)
Maize	123	30	---	---
Beans	24	8	2	1
Fish	5	2	---	---
W/flour	190	132	---	---
Bread	---	---	1	1
Root crops*	2	1	---	---
Sugar	427	387	---	---
Rice	1,137	559	2	1
Bananas	90	51	---	---
Millet	---	---	9	2
Sorghum	---	---	63	20
Maize meal	40	11	---	---
G/nuts	---	---	3	2
Coffee		1,117		40
Livestock		3	---	---
Other**		1	---	---
Total	2,038	2,302	80	67

* Tubers include cassava, Irish potatoes, sweet potatoes and yams

** Other include choroko, hides and skins, sisal, coconuts, cotton seeds and cotton seed cake.

Source: Monitoring Survey Data, 1995/1996.

US $0.2 million), car and bicycle parts (US $36 thousand), sweets and biscuits (US $31 thousand), beer and spirits (US $9 thousand) and petroleum products (US $7 thousand), as shown in Table A.4. Tanzania was therefore a net exporter of cooking fats, petroleum products, soft drinks, car and bicycle parts, and timber and charcoal to Uganda among the major goods traded between the two countries, while Uganda was found to be a net exporter of toiletries, new textiles, sweets and biscuits, and salt to Tanzania.

TRADE WITH ZAMBIA

Exports and Imports of Agricultural Products and Fish

The major agricultural commodity traded between Tanzania and Zambia was sugar. Although the movement of sugar was in both directions, the net flow was into Tanzania and was found to be the main agricultural commodity imported from Zambia, whose quantity was about 7 thousand metric tons valued at over US $5.5 million. Millet and groundnuts were also imported from Zambia and were valued at approximately US $102 and US $9 thousand, respectively. Other agricultural imports were valued at US $14 thousand (Table A.5). Major agricultural imports were thus sugar, millet and groundnuts.

Maize was by far the most important informal agricultural export to Zambia. Over 6.6 thousand metric tons of maize valued at over US $1.1 million were informally exported to Zambia annually. Other important informal exports were beans (1,109 metric tons), rice (581 metric tons), wheat flour (407 metric tons), fish–*dagaa* (45 metric tons), tubers (576 metric tons) and sugar (77 metric tons). The values of

Table A.4 Value of ICBT in Industrials between Tanzania and Uganda, 1995/1996

Commodity	Value of Exports (US$ thousands)	Value of Imports (US$ thousands)
Cooking Fats/Oils	51	2
Toiletries	14	532
Petroleum Products	400	7
Beer & Spirits	30	9
Soft Drinks	75	1
New Textiles	50	574
Electronics	---	2
Const. materials	1	---
Sweets & Biscuits	1	31
Car & Bicycle Parts	58	36
Charcoal & Timber	31	2
Salt	3	175
Other*	24	73
Total	738	1,444

* Other refers to: ***imports***–kitchen ware, drugs, matches, plastics, dry cells, gunny sacks, sisal fibre, umbrellas and sandals; ***exports***–plastics, herbicides and cigarettes.

Source: Monitoring Survey Data, 1995/1996.

these commodities are given in Table A.5. Other agricultural exports (tomatoes, onions and cabbages) were valued at US $37 thousand. Major agricultural exports to Zambia were thus cereals (maize, beans, rice), wheat flour, fish and root crops (mainly Irish potatoes).

All the exports except sugar were locally produced in Tanzania. Sugar that was being exported to Zambia was said to have originated from Malawi. Similarly, the sugar imports from Zambia were said to have originated in Malawi. Indeed, the informal cross-border trade country report for Malawi indicates that in the case of Malawi/Zambia trade, the main Malawian exports to Zambia were maize and sugar while the main import was fertilizer (Minde and Nakhumwa, 1996). But there were indications that the fertilizer initially came from Malawi before market liberalization. The Tanzania/Malawi trade also indicates that sugar was the main Tanzanian import from Malawi.

Exports and Imports of Industrial Products and Forest Resources

Informal cross-border trade in industrial and forest resources between Tanzania and Zambia was relatively small compared with the other neighboring countries. The movement of most of the industrial goods was in either direction but at different levels. The major exports to Zambia in value terms were toiletries[8] (US $164 thousand), cooking fats/oils (US $66 thousand), car and bicycle parts (US $34 thousand), construction materials–mainly corrugated iron sheets–(US $12 thousand), petroleum products (US $12.3 thousand) and beer[9] (US $11 thousand). Other exports were new textiles, margarine, soft drinks and electronics–radios and cassettes (Table A.6). Most of these commodities were re-exports except beer (Tanzania pilsner and safari) and construction materials. Tanzania was found to be a net exporter of cooking fats, margarine, toiletries, petroleum products, beer and spirits, soft drinks, electronics, construction materials, sweets and biscuits, car and bicycle parts and salt to Zambia. Other industrial products exported included insecticides, mattresses, plastics, kitchen ware and shoe soles.

Zambia's main informal exports to Tanzania were toiletries[10] (US $42 thousand) and new textiles (US $36 thousand). Tanzania also imports beer[11] and spirits, soft drinks, construction materials (mainly cement),

Table A.5 Informal Trade in Foodstuffs between Tanzania and Zambia, 1995/1996

Commodity	Exports		Imports	
	Quantity (mt)	Value (US$ thousands)	Quantity (mt)	Value (US$ thousands)
Maize	6,607	1,160	---	---
Beans	1,108	1,155	---	---
Fish	45	115	---	---
W/flour	407	227	---	
Root crops*	576	67	---	---
Sugar	77	53	6,995	5,545
Rice	1,034	542	---	---
Bananas	30	13	---	---
Millet	---	---	381	102
G/nuts	7	1	29	9
Livestock		3	---	---
Milk		1	---	---
Other**		37		14
Total	9,891	3,374	7,405	5,670

* Root crops include cassava, Irish and sweet potatoes and yams.

** Other refers: ***exports***–mainly tomatoes, onions and cabbages; ***imports***–mainly hides and skins

Source: Monitoring Survey Data, 1995/1996.

petroleum products and timber from Zambia. Most of the textiles (*vitenge*) are re-exports originating from Democratic Republic of Congo. Other Zambian informal industrial goods exported to Tanzania were gunny sacks, fertilizer, dry cells, hides and skins (Table A.6). The net flow of industrial commodities from Zambia to Tanzania included new textiles and timber.

TRADE WITH MALAWI

Exports and Imports of Agricultural Products and Fish

The main informal agricultural exports from Tanzania to Malawi were beans (327 metric tons), root crops–mainly Irish potatoes–(342 metric tons), fish (20 metric tons), bananas (18 metric tons) and groundnuts (12 metric tons), with their estimated values given in Table A.7. Other agricultural exports from Tanzania to Malawi were fruit, tomatoes, onions, cabbages and palm oil as indicated in Table A.7.

The main informal imports from Malawi were 5,048 metric tons (US $3 million) of sugar, 323 metric tons (US $186 thousand) of rice, 73 metric tons (US $190 thousand) of fish, 232 metric tons (US $41 thousand) of groundnuts and 384 metric tons (US $39 thousand) of maize. The figures for informal imports from Malawi are depicted in Table A.7. Although movement of some of these agricultural food commodities was in both directions, Tanzania was found to be a net exporter, in value terms, of beans, root crops, bananas, fruit and other food items such as cabbages and tomatoes. On the other hand, Malawi was found to be a net exporter of the following items to Tanzania: sugar, rice, maize, wheat flour, fish and groundnuts.

Exports and Imports of Industrial Products and Forest Resources

As was the case with agricultural foodstuffs, informal trade in industrial goods moved in both directions. In value terms, the main exports to Malawi were new textiles (*vikoi and vitenge*), beer and spirits,[12]

Table A.6 Value of ICBT in Industrials between Tanzania and Zambia, 1995/1996

Commodity	Value of Exports (US $ thousands)	Value of Imports (US $ thousands)
Cooking Fats/Oils	66	3
Margarine	2	1
Toiletries	164	42
Petroleum Products	12	3
Beer & Spirits	11	7
Soft Drinks	31	1
New Textiles	11	36
Electronics	3	---
Const. Materials	12	2
Sweets & Biscuits	1	---
Car & Bicycle Parts	31	---
Charcoal & Timber	---	1
Salt	5	---
Other*	12	6
Total	358	157

* Other refers to: ***exports***–kitchen ware, insecticides, shoe soles, mattresses and plastics; ***imports***–dry cells, gunny sacks, fertilizer, and hides and skins.

Source: Monitoring Survey Data, 1995/1996.

old textiles,[13] electronics and cooking fats in that order. In addition, there were exports of margarine, petroleum products, toiletries,[14] soft drinks (juice), construction materials (mainly cement), and sweets and biscuits.[15] Other exports were kitchen ware, drugs, exercise books, insecticides, general plastics, kerosene lamps, mats, compressor machines, boat engines and traveling bags. Most of Tanzania's industrial exports to Malawi were re-exports. From Malawi, informal traders smuggled numerous commodities into Tanzania including beer and spirits, toiletries, soft drinks (sodas), and sweets and biscuits. Other imports from Malawi were matches, mattresses and gunny sacks (Table A.8).

Tanzania was a net informal exporter of the following industrial goods to Malawi: new and used textiles, cooking fats, margarine, petroleum products, electronics, construction materials (mainly iron sheets but also cement), car and bicycle parts, and salt. On the other hand, Tanzania was found to be a net importer of toiletries, beer and spirits, soft drinks, sweets and biscuits, and forest resources–timber and charcoal.

TRADE WITH THE DEMOCRATIC REPUBLIC OF CONGO

Exports and Imports of Agricultural Products and Fish

Democratic Republic of Congo (DRC), formerly Zaire, was found to be the most important informal trading partner of all Tanzania's neighbors in terms of the volumes involved. Large volumes of agricultural food commodities from Tanzania were informally exported into DRC. The unique aspect of Tanzania's trade with Democratic Republic of Congo was that trade in agricultural food commodities comprised only exports.

The main food commodities informally exported were fish, maize, beans, wheat flour, root crops, sugar and rice. The quantities and values of these commodities are as shown in Table A.9. Some of the rice originated in Thailand.

The large volume of informal exports of food commodities from Tanzania to the DRC clearly attests to

Table A.7 Informal Trade in Foodstuffs between Tanzania and Malawi, 1995/1996

Commodity	Exports Quantity (mt)	Exports Value (US$ thousands)	Imports Quanity (mt)	Imports Value (US$ thousands)
Maize	9	1	284	39
Beans	327	117	7	3
Fish	20	51	73	190
W/flour	2	1	4	3
Root crops*	342	51	6	1
Sugar	---	---	5,048	2,995
Rice	7	2	323	186
Bananas	18	3	---	---
Fruit**	5	1	---	---
G/nuts	12	4	232	41
Millet	---	---	6	1
Other***		41		12
Total	742	272	5,983	3,471

* Root crops include cassava, Irish and sweet potatoes and yams.

** Fruit include oranges, pineapples, lemon and passion fruit.

*** Other refers to: ***exports***–tomatoes, onions, cabbage, eggs and palm oil; ***imports***–cashewnuts, poultry, eggs, palm leaves and tobacco.

Source: Monitoring Survey Data, 1995/1996.

the enormous potential of the trade between the two countries. The official trade that had been thriving between the two countries has been crippled by the on going market reforms which have incapacitated the monopolistic government parastatals. These parastatals were charged with the responsibility of conducting business with the DRC. Another explanation for such huge exports of food grains is the state of road infrastructure in eastern part of DRC. The region is cut off from the relatively developed western part of the country due to its poor infrastructure and as a result, the eastern region obtains most of its food grains requirements from the neighboring countries of Tanzania and Uganda. Most of the agricultural food supplies originate from inland areas of Tanzania, which are well served by the railway system, and are sent to the region of Kigoma. From there they are shipped to the DRC.

As for fish, our discussions with government officials revealed that some of the traded fish comes from Lake Victoria and may occasionally be recorded in the offshore lake town of Mwanza as official exports to the DRC. It is therefore likely that our monitoring exercise may have double counted some of the customs recorded fish consignments as official exports as being part of the informal exports. But it is also true that the huge amounts fished from Lake Tanganyika constituted a large portion of the informal fish exports from Tanzania to the DRC.

Exports and Imports of Industrial Products and Natural Resources

Tanzania's major informal industrial exports to the Democratic Republic of Congo were petroleum products (US $55.3 million), cooking fats and oils (US $3.3 million), salt (US $3.9 million), new textiles (US

Table A.8 Value of ICBT in Industrials between Tanzania and Malawi, 1995/1996

Commodity	Value of Exports (US$ thousand)	Value of Imports (US$ thousand)
Cooking Fats/Oils	30	1
Margarine	3	---
Toiletries	29	143
Petroleum Products	10	---
Beer & Spirits	137	408
Soft Drinks	17	62
New Textiles	325	4
Old Textiles	114	10
Electronics	42	1
Const. materials	7	---
Sweets & Biscuits	2	24
Car & Bicycle Parts	8	1
Charcoal & Timber	---	5
Salt	5	---
Other*	352	108
Total	1,081	767

* Other refers to: ***exports***–kitchenware, drugs, exercise books, mats, traveling bags, general plastics, kerosene lamps, insecticides, boat engines and compressor machines; ***imports*** –mattresses, matches, and gunny sacks.

Source: Monitoring Survey Data, 1995/1996.

$2.0 million), old textiles (US $1.6 million), car and bicycle parts (US $1.5 million) and electronics (US $1.4 million). At the same time, the major imports from the DRC were new textiles (US $65.7 million), toiletries (US $5.4 million) and margarine (US $2.1 million). Table A.10 shows the values of these exports and imports.

All the cooking fats/oils, some toiletries (mainly cosmetics) and some sweets, biscuits and margarine imports were found to have originated in Zambia. Beer (primus) and soft drinks originated in Burundi, while part of the new textiles exported to the DRC were found to have originated in Kenya and India. Some of the salt exports also originated in Kenya. The main construction materials exported to the DRC was cement, accounting for over 96 percent of the total value of the construction materials. It can thus be seen that informal trade in industrial goods between Tanzania and the DRC comprised re-exports sourced from third countries.

Again, as in the case with fish, the large volume of petroleum products observed during the monitoring exercise may have been due to double counting of the official recorded consignments as constituting informal trade. On the other hand, the proportion of the of the informal trade may also have been destined for Rwanda and Burundi which were experiencing civil strife by the time monitoring was being carried out. The strife had negatively impacted on the supply of the commodity in the two countries. It could also be that the failure of the Government to decontrol the marketing arrangements and prices of the petroleum sub-sector may have contributed to the size of informal trade. The importation, supply and pricing of

Table A.9 Informal Trade in Foodstuffs between Tanzania and DRC, 1995/1996

Exports Commodity	Quantity (mt)	Value (US$ thousand)
Maize	6,032	1,047
Beans	4,376	2,008
Fish	53,090	66,195
W/flour	4,402	2,942
Root crops*	4,403	1,391
Sugar	1,189	861
Rice	6,867	3,359
Fruit**	4	1
Other***		38
Total	80,363	77,842

* Root crops include cassava, Irish potatoes, sweet potatoes and yams.

** Fruit includes citrus, pineapples and passion fruit.

*** Other refers to tomatoes, onions, cashewnuts and coconuts.

Source: Monitoring Survey Data, 1995/1996.

petroleum products continue to be controlled by the Government.

TRADE WITH MOZAMBIQUE

Although border monitoring was not conducted from the Tanzanian side of the border, unrecorded trade between the two countries was monitored from the Mozambican side. The figures reported here are extracts from Mozambique's informal cross-border trade country study report (Macamo, 1997).

Exports and Imports of Agricultural Products and Fish

Food commodities moved in both directions, but the trade-favored Mozambique exported goods worth US $2.2 million while its imports were estimated at about US $0.3 million. Major food imports was comprised of fish and prawns (US $0.98 million), horticultural crops (fruit and vegetable) valued at US $0.46 million and food grains–maize and beans–amounting to US $0.14 million.

Tanzania's informal exports to Mozambique were limited to sugar and a few other goods such as maize flour, rice and milk (Table A.11). The sugar exported to Mozambique was said to have originated from Malawi either directly entering Tanzania or indirectly by passing through Zambia. Milk was also a re-export commodity.

Due to the poor infrastructure on the Mozambican side and the remoteness of the northern part of the country with respect to the major consuming centers in the south, the producers found foreign markets across the border in the neighboring Tanzania very attractive. They traveled there by circumventing the barrier imposed by the presence of River Ruvuma using the Indian Ocean route.

Exports and Imports of Industrial Products and Natural Resources

Trade of non-agricultural commodities between Tanzania and Mozambique was dominated by re-exports from a third country. Informal trade is, however, in favor of Tanzania, whose exports to Mozambique amounted to over US $4 million, against imports

Table A.10 Value of ICBT Trade in Industrials between Tanzania and DRC, 1995/1996

Commodity	Value of Exports (US$ thousands)	Value of Imports (US$ thousands)
Cooking Fats/Oils	3,310	360
Margarine	16	2,171
Toiletries	494	5,396
Petroleum Products	55,275	---
Beer and Spirits	466	729
Soft Drinks	371	141
New Textiles	2,014	65,676
Old Textiles	1,627	---
Electronics	1,368	21
Const. materials	643	---
Sweets & Biscuits	162	151
Car & Bicycle Parts	1,550	63
Charcoal & Timber	33	---
Salt	3,962	---
Other*	6,573	1,155
Total	77,864	75,863

* Other refers to: ***exports***–fans, dry cells, cigarettes, caustic soda and plastic pipes; ***imports***–shoes, sauces and traveling bags.

Source: Monitoring Survey Data, 1995/1996.

valued at about US $1.0 million. Informal non-agricultural exports to Mozambique constituted mainly shoes (US $1.7 million), electrical and kitchen ware (US $1.3 million), and vehicle and bicycle parts (US $0.51 million). Others included textiles, cigarettes and soft drinks. Most of these commodities had their origin in the Middle East and Southeast Asia. On the other hand, the major informal non-agricultural imports from Mozambique were wood products. Other notable imports in this category included handicrafts, as shown in Table A.12. Poor road infrastructure and hence high transport costs coupled with high interest rates in Mozambique influenced the direction in which the informal trade in industrials went.

Table A.11 Informal Trade in Foodstuffs between Tanzania and Mozambique, 1996

Commodity	Exports Value (US$ thousands)	Imports Value (US$ thousands)
Prawns	18	622
Vegetables	27	353
Fish	31	362
Seed	2	225
Sugar	89	1
Maize grain	1	49
Beans	3	90
Fruit	0.3	110
Other*	116	434
Total	287.3	2,246

* Other refers to: ***exports***–maize flour, rice and milk; ***imports***–meat, rice, peanuts, milk and maize grain.

Source: Macamo, 1997.

Table A.12 Value of ICBT in Industrials between Tanzania and Mozambique, 1996

Commodity	Exports Value (US$ thousands)	Imports Value (US$ thousands)
Shoes	1,667	10
Electronics	673	25
Wood Products	20	685
Kitchen Ware	645	3
Veh. and Bicycle Parts	511	2
Textiles	206	11
Construction Materials	177	3
Other*	330	190
Total	4,229	929

* Other refers to: ***exports***–cigarettes and soft drinks; ***imports***–handicrafts.

Source: Macamo, 1997.

Fig A.1.1. Quantity of Food by Trade Direction

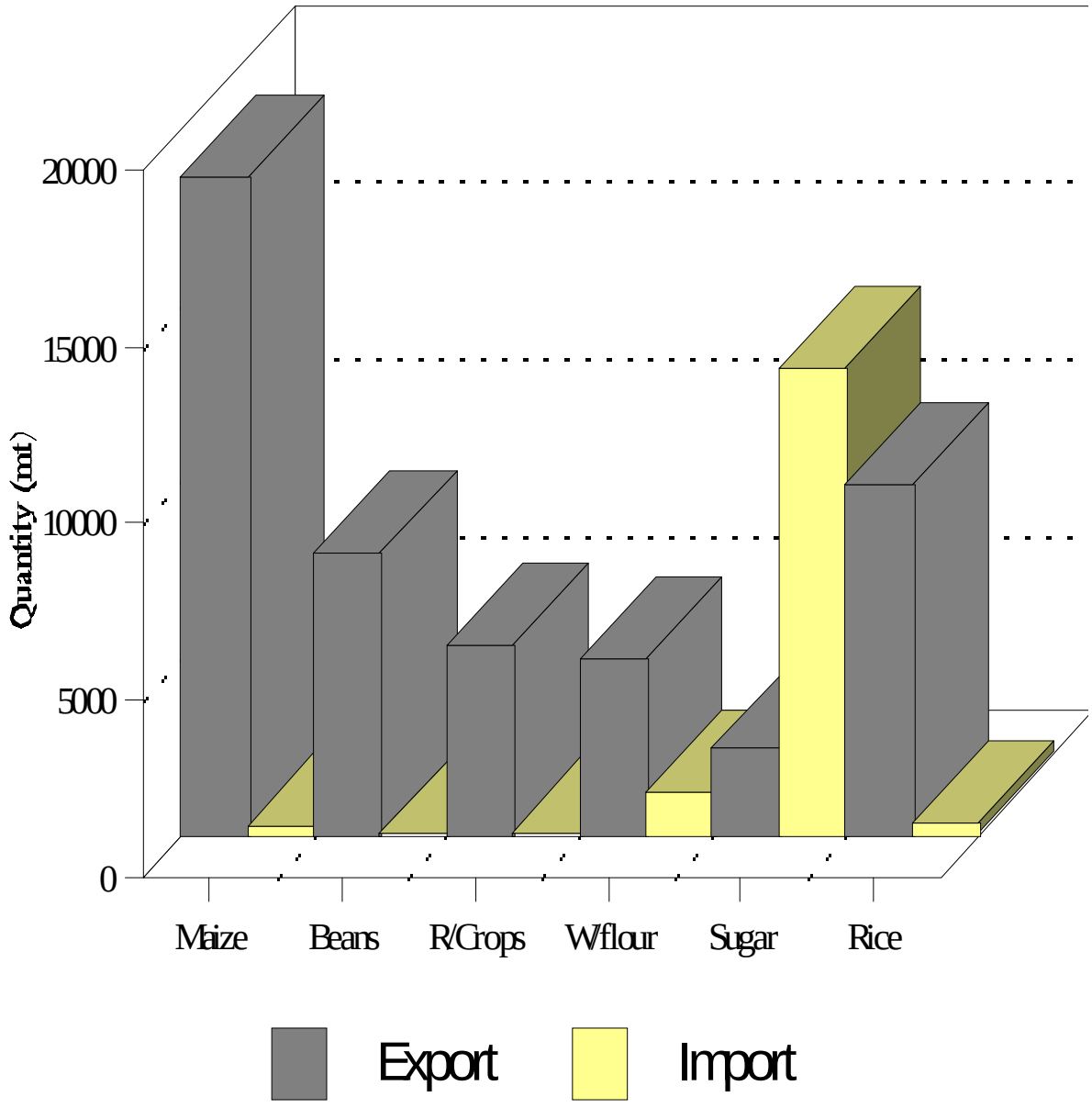


Fig A.1.2. Quantity of Food by Trade Direction

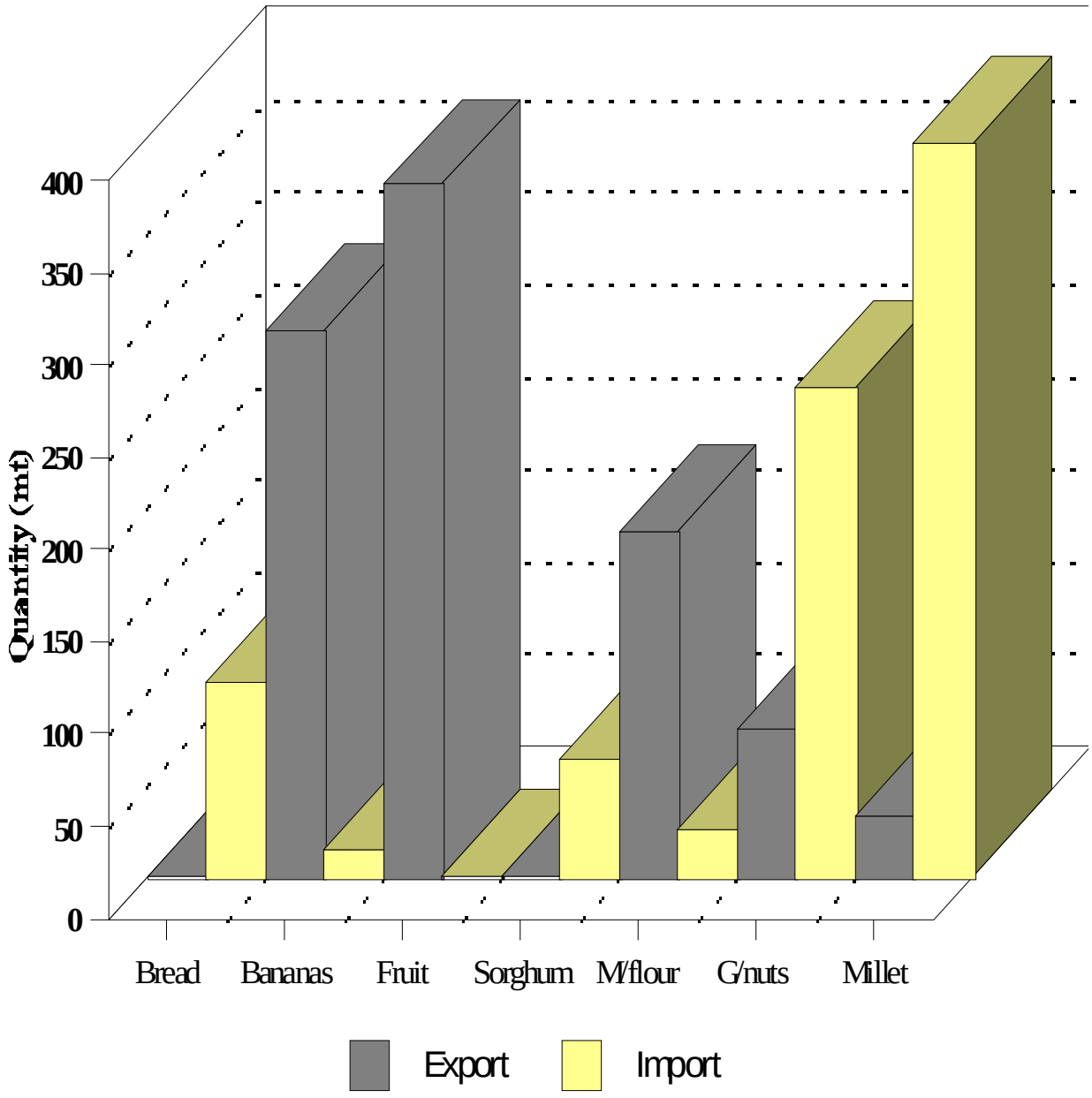


Fig A.2.1. Value of Food by Trade Direction

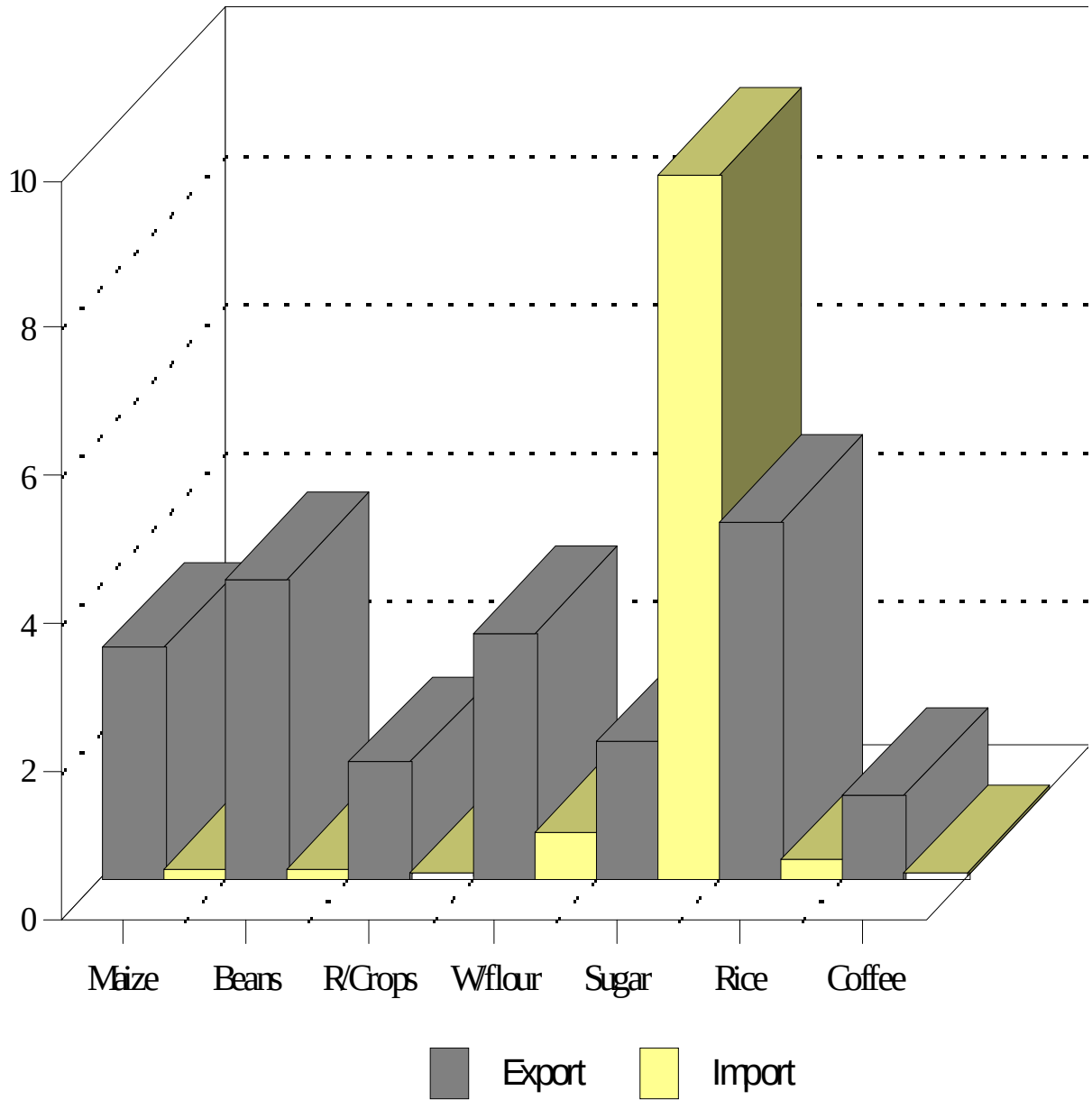


Fig A.2.2. Value of Food by Trade Direction

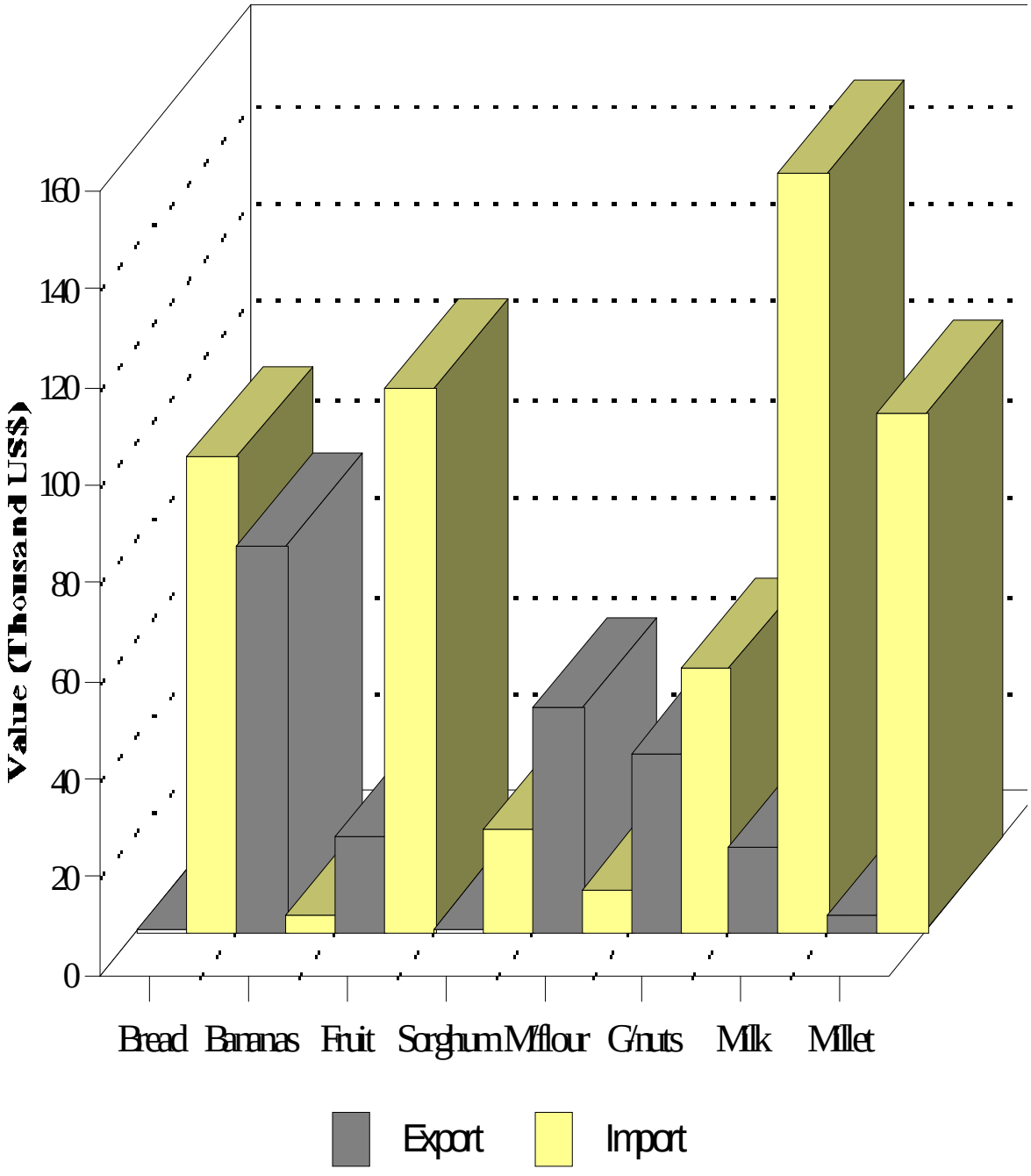
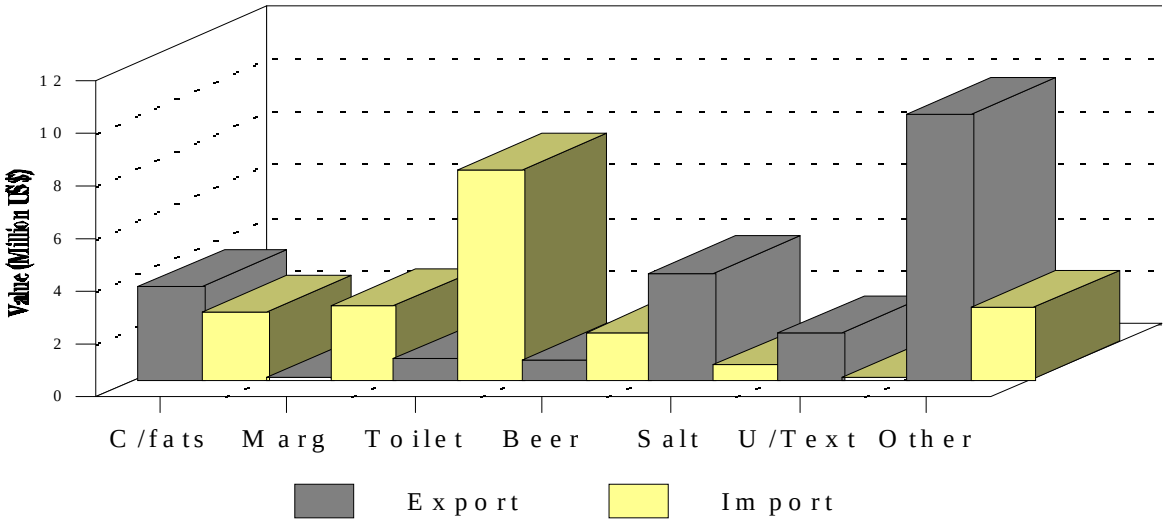


Fig A.3.1: Value of Industrial Goods by Trade Direction



Value of Petroleum Products and New Textiles by Trade Direction

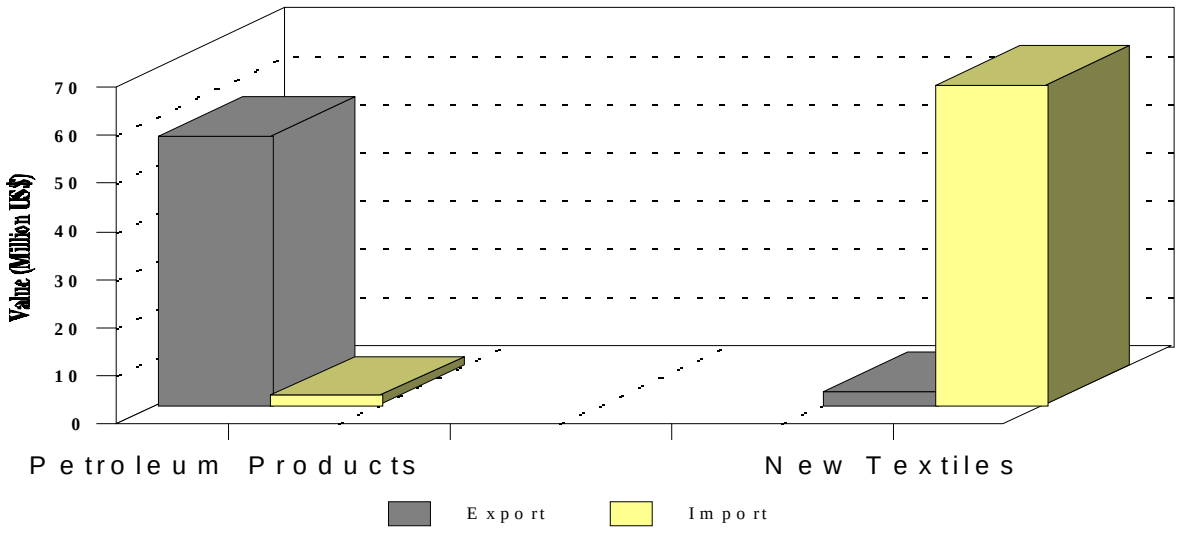
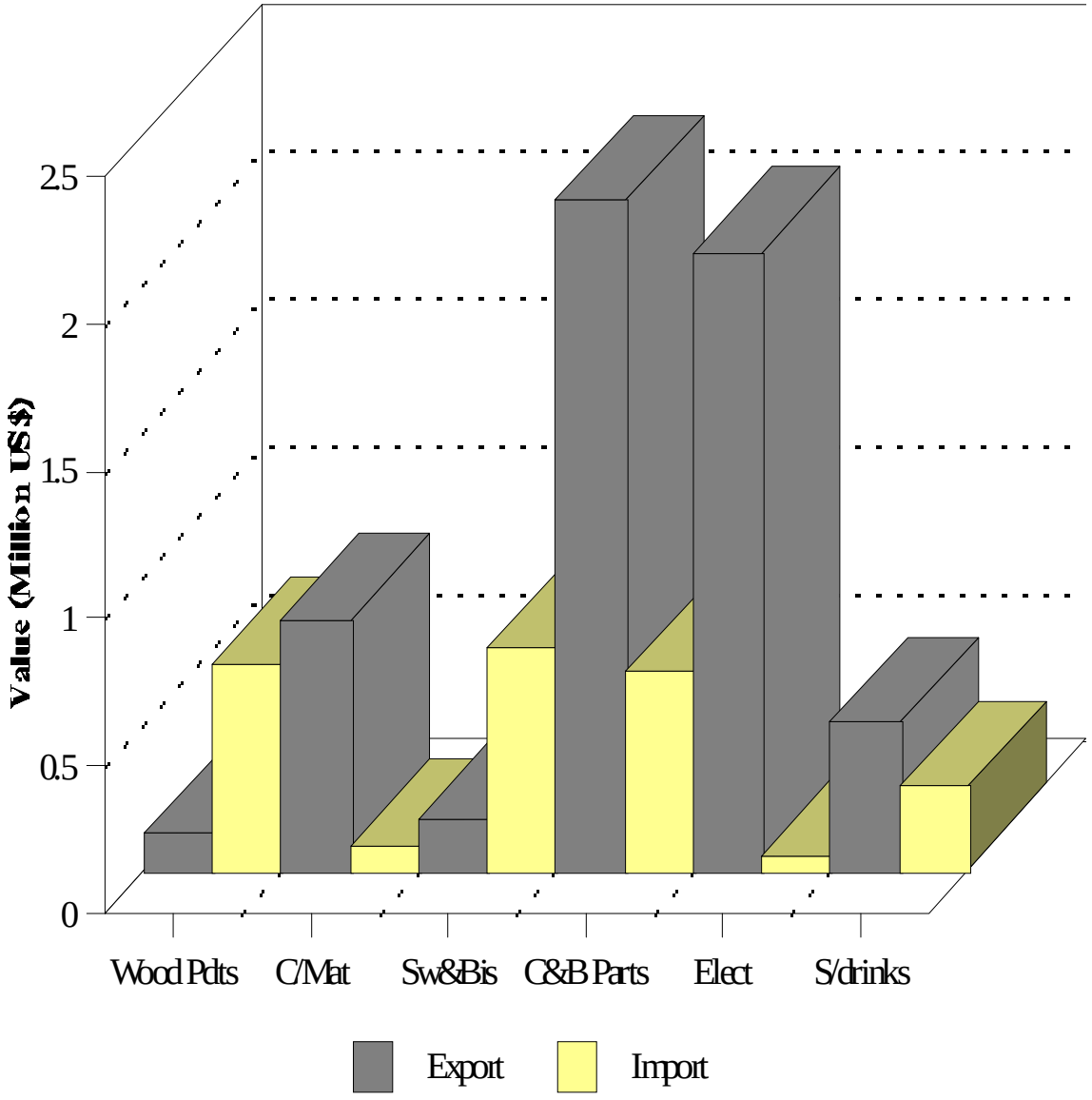


Fig A.3.2. Value of Industrial Goods by Trade Direction



Appendix B

Total Value of Industrial Goods Traded by Site

Tanzania was found to be a net importer of industrial manufactures from the neighboring countries. Furthermore, much of Tanzania's industrial exports was comprised of re-exports originating in a third country. The weakness of Tanzania's industrial sector emanates from the previously pursued policies from immediately after independence. There was a strong drive towards industrialization based on import substitution, and large investments were made in state-owned manufacturing enterprises. Protectionism discriminated against exports (mainly agricultural), domestic industries suffered from capacity under-utilization, and the limitations imposed by small internal markets undermined import substituting industries. The distortions spurred informal cross-border trade, which as this study has shown, is substantial. Tables B.1 and B.2 shows the value of industrial imports and exports by site, respectively.

Table B.1.1 Total Value of Industrial Goods Import by Site, 1995/1996

Site	Value of Goods in US$ (millions)						
	Cooking Fats	Margarine	Toiletry	Petroleum	Beer & Spirits	New Textiles	Electronics
Namanga	1.294	0.343	0.968	---	0.011	0.001	---
Tanga	0.018	0.006	0.012	---	0.001	0.002	---
Horohoro	0.032	0.015	0.024	---	0.008	---	---
Tarakea	0.031	0.013	0.059	0.002	---	---	---
Holili	0.518	0.156	0.279	---	0.005	0.001	---
Mwanza	---	---	0.014	1.752	0.535	---	---
Sirari	0.266	0.040	0.436	0.001	0.042	0.010	0.001
Kyela	0.001	0.001	0.143	---	0.408	0.004	0.001
Tunduma	0.002	0.001	0.042	0.003	0.007	0.036	---
Kigoma	0.360	2.171	5.396	---	0.729	65.676	0.021
Mutukula	0.002	---	0.532	0.007	0.009	0.574	0.002
Total	2.524	2.746	7.905	1.765	1.755	66.304	0.025

Table B.1.2 Total Value of Industrial Goods Import by Site, 1995/1996

Site	Value of Goods in US$ (millions) Old Textiles	Charcoal & Timber	Construction Materials	Sweets & Biscuits	Soft-drinks
Namanga	---	---	---	0.035	0.022
Tanga	---	---	0.001	0.002	---
Horohoro	---	---	---	0.114	0.002
Tarakea	---	---	---	0.002	---
Holili	---	---	---	0.177	0.052
Mwanza	---	0.008	---	---	---
Sirari	---	---	0.072	0.208	0.002
Kyela	0.01	0.005	0.001	0.024	0.062
Tunduma	---	0.001	0.002	---	0.001
Kigoma	---	---	---	0.151	0.141
Mutukula	---	0.002	---	0.031	0.001
Total Value	0.01	0.016	0.076	0.744	0.283

* Construction Material includes cement, iron-sheets and nails.

Table B.2.1 Total Value of Industrial Goods Export by Site, 1995/1996

Site	Value of Goods in US$ (millions)						
	Cooking Fats	Margarine	Toiletry	Petroleum	Beer & Spirits	New Textile	Electronics
Namanga	---	---	0.002	---	---	0.004	---
Tanga	---	---	0.02	0.001	0.001	0.003	---
Horohoro	---	---	0.001	---	---	---	---
Tarakea	---	---	---	---	---	---	---
Holili	---	---	---	---	---	---	---
Mwanza	---	---	---	0.013	0.068	---	---
Sirari	---	---	0.003	0.001	---	0.001	---
Kyela	0.03	0.003	0.028	0.010	0.137	0.324	0.042
Tunduma	0.07	0.002	0.163	0.012	0.011	0.011	0.003
Kigoma	3.31	0.016	0.494	55.275	0.465	2.014	1.368
Mutukula	0.05	---	0.014	0.400	0.030	0.050	0.001
Total Value	3.46	0.021	0.725	55.712	0.712	2.407	1.414

* Construction Material include cement, iron-sheets and nails.

Table B.2.2 Total Value of Industrial Goods Export by Site, 1995/1996

Site	Value of Goods in Million US$ Old Textiles	Charcoal & Timber	Construction* Material	Sweets & Biscuits	Soft-drinks
Namanga	---	---	0.001	---	---
Tanga	---	0.006	0.010	---	0.005
Horohoro	---	---	0.001	---	---
Tarakea	---	0.041	---	---	---
Holili	---	---	---	---	---
Mwanza	---	---	0.001	---	---
Sirari	---	0.001	---	---	---
Kyela	0.114	0.001	0.007	0.002	0.017
Tunduma	---	---	0.012	0.001	0.031
Kigoma	1.627	0.033	0.643	0.162	0.371
Mutukula	---	0.024	0.001	0.001	0.075
Total Value	1.741	0.106	0.676	0.166	0.499

* Construction Material include cement, iron-sheets and nails.

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